

MODEL:RSL-2702S/RSL-382S

Roll Laminator Service Manual



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1. Safety Precautions

Failure to comply any of the following safety procedures could result in serious injury. Please read the instructions carefully and keep for future reference.

1. Only a licensed electrician should install wiring and outlet for the laminator.
2. Ensure the unit is plugged into a properly grounded outlet with the correct voltage.
3. Keep hands and clothing(ie.Neckties)away from rollers. The rollers are pinch points that can trap body parts or clothing and cause serious injury .
4. Keep flammable and wet objects away from the machine .
5. Place machine on a level surface.
6. Avoid excessive sunlight, humidity and extreme temperatures.
7. Ensure the unit is turned off, cooled ,and unplugged from the outlet prior to moving and/or repairing.
8. Keep out of reach of children.
9. Only Royal Sovereign authorized maintenance and service technicians should make repairs.
10. Do not attempt to laminate items that exceed total recommended material thickness for the unit.
11. When cleaning the machine, don't use flammable sprays or materials.
12. Do not touch the rollers when they are hot or place foreign objects inside the machine.
13. Do not cover the surface of the machine until the machine has completely cooled.

2. Troubleshooting

Note: While repairing:

- a. *Make sure the power plug is unplugged from the power outlet.*
- b. *Open both side covers and rear cover.*
- c. *Be sure to follow the steps below in order.*

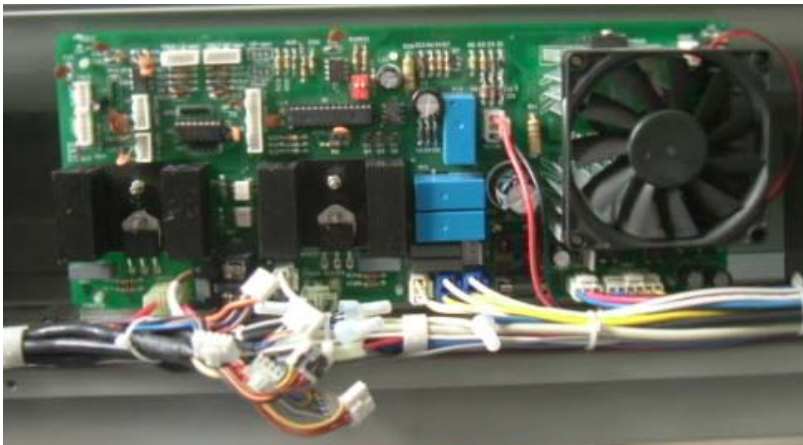
2.1 Rollers Not Heating

CAUSES:

1. Improper laminating mode.
2. Heating wire is not connected to the main PCB.
3. Blown (burnt) upper and/or lower wire fuse (T/Fuse).
4. Defective Bi-Metal.
5. Defective heater.
6. Defective Main PCB.

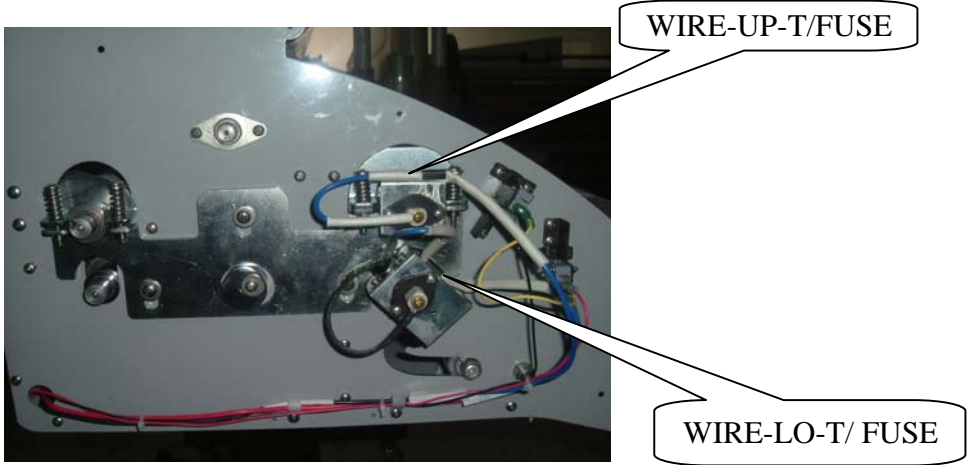
MEASURE

1. **Improper laminating mode.**
 - a. Ensure that the laminating mode is in the “Hot” mode, not the “Cold” mode.
Press “C/HOT” button on the control panel to change the mode.
2. **Heating wire is not connected to the main PCB.**
 - a. Connect the upper and lower heating wires to the main PCB.



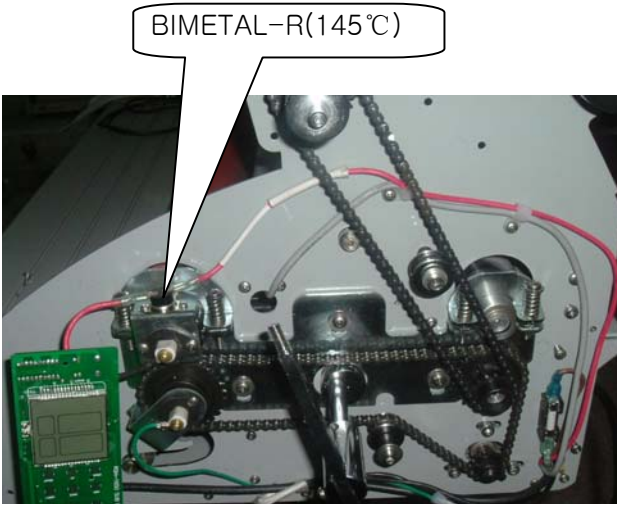
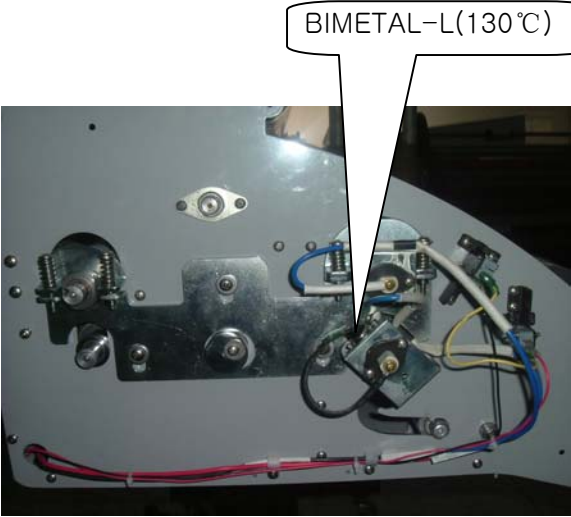
3. Blown (burnt) upper and/or lower wire fuse (T/Fuse).

- a. Replace the T/Fuse wire located on the left-hand side.



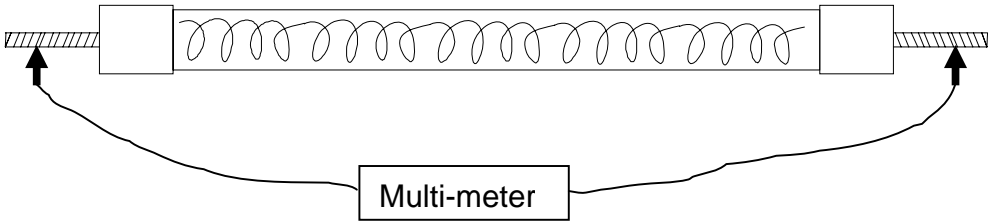
4. Defective Bi-Metal.

- a. Replace the Bi-Metal

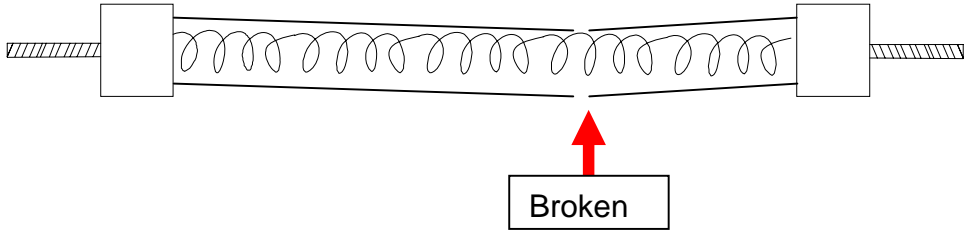


5. Defective heater.

- a. Using the multi-meter, test the continuity of the heater. If it fails, replace the heater.



- b. Physically examine the heater assembly for breakage.



6. Defective Main PCB.

- a. Replace the PCB Main.

2.2) Rollers Over Heating

CAUSES

- 1. Lower and upper heat sensors are reversed on the PCB Main.
- 2. Defective T/Fuse wire.
- 3. Defective heater.
- 4. Defective main PCB.

MEASURES

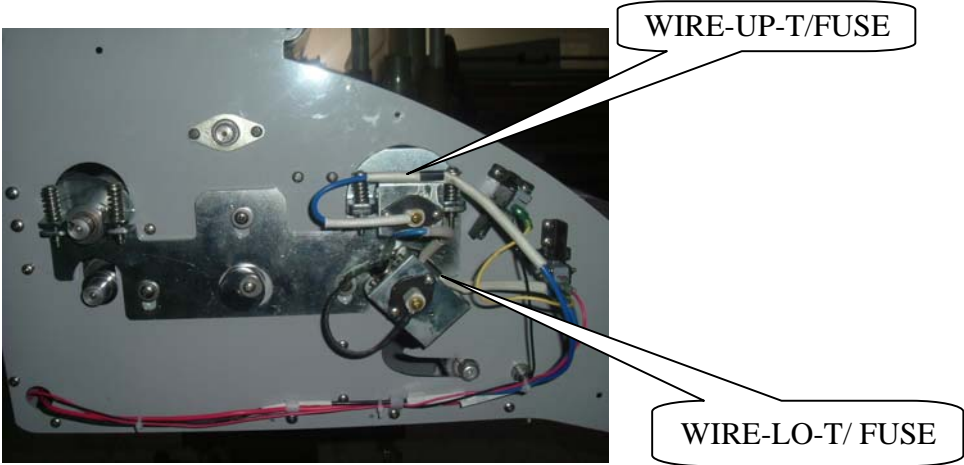
- 1. Wires for lower and upper heat sensors are reversed on the main PCB.
 - a. Reverse the heat sensors.

Connector-Wire Sensor



2. Defective T/Fuse wire.

- a. Replace the T/Fuse wire located on the left-hand side.



3. Defective heater.

- a. Test continuity of the heater. If it fails, replace the heater.
- b. Glass tube that surrounds heating coil is broken – replace the heating element.

4. Defective Main PCB.

- a. Replace the PCB Main.

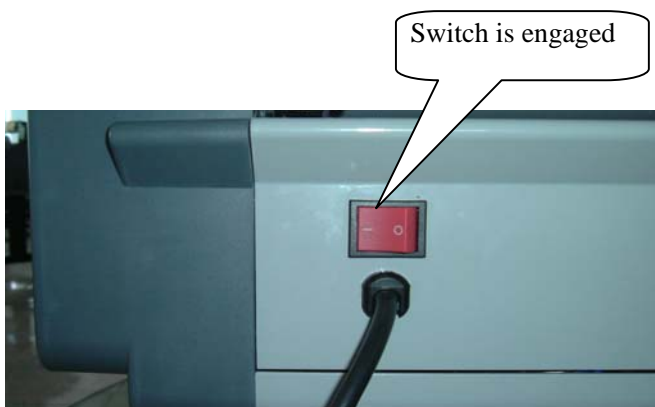
2.3) Rollers Not Running

CAUSES

1. No power to the unit.
2. Emergency switch is engaged.
3. Opened safety cover.
4. Opened Front Table Switch.
5. Film is jammed on the rollers.
6. Disconnected motor wire.
7. Blown motor fuse.
8. Defective main motor.
9. Defective main PCB.

MEASURES

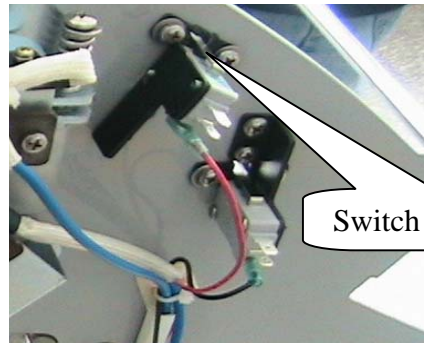
1. No power to the unit.
 - a. Make sure the power plug is connected to the proper source of outlet (220V, 15Amp, & single phase).
2. Emergency switch is engaged.



3. Opened safety cover.

- a. Close the safety cover and double check to insure that the safety cover switch is engaged.

Note: By closing the safety cover, it engages the safety cover switch.



4. Opened Front Table Switch.

- a. Properly position the front table to engage the switch.

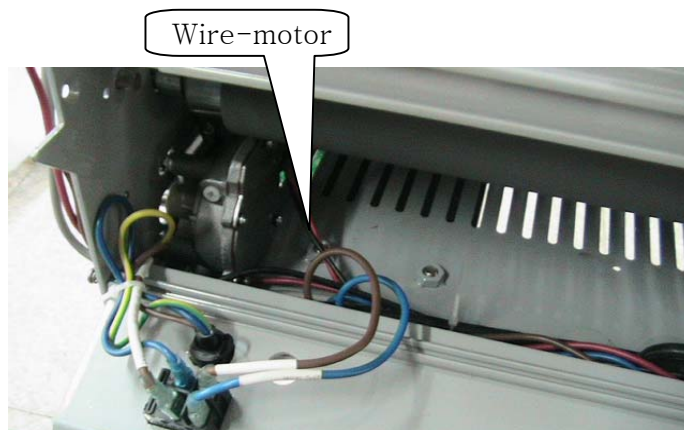


5. Film is jammed on the rollers.

- a. Un-jam the film using a combination of the pressure lever and reverse button.

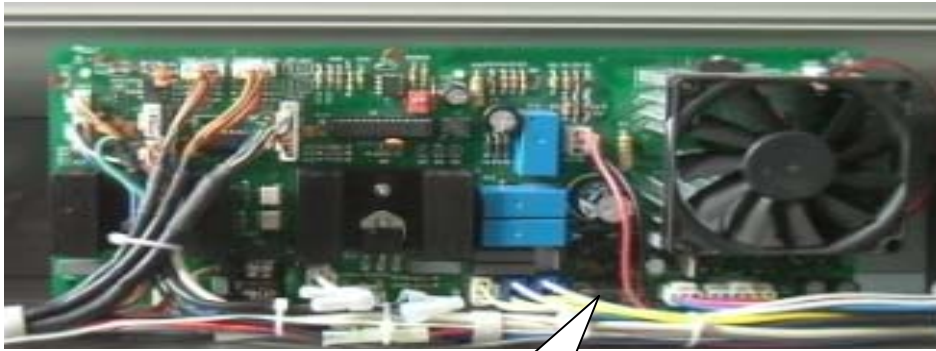
6. Disconnected-motor wire.

- a. Check the motor wire connection with PCB.



7. Blown motor fuse.

- a. Replace the motor fuse located above the main power switch.



8. Defective main motor.

Motor Fuse

- a. Replace the main motor.

9. Defective main PCB.

- a. Replace the main PCB.

2.4) No Main Power

CAUSES

- 1. No electricity.
- 2. Blown main fuse.
- 3. Disconnected main power wires.
- 4. Defective transformer.

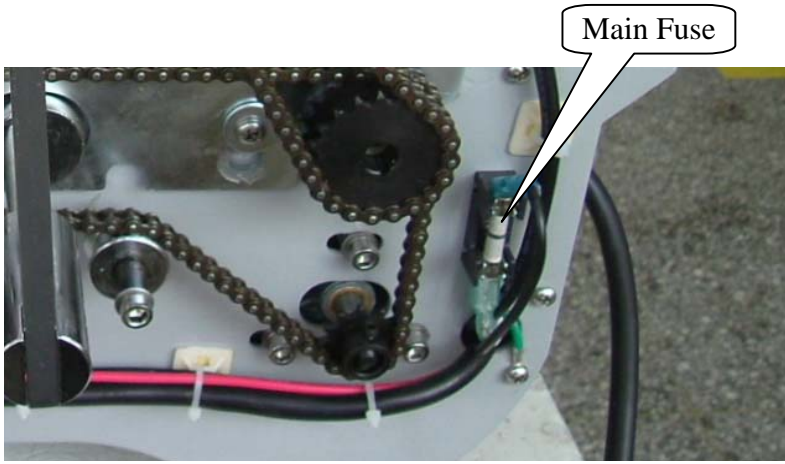
MEASURES

1. No Electricity.

- a. Double check to insure that you have electricity from your outlet.
- b. Check the circuit breaker.
- c. Double check that source of power is 220V, 15Amp, and single phase.

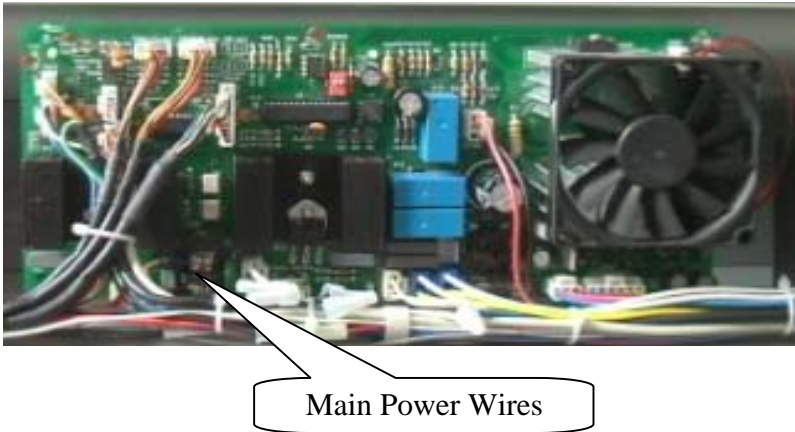
2. Blown main fuse.

- a. Replace the main fuse located above the main power switch.



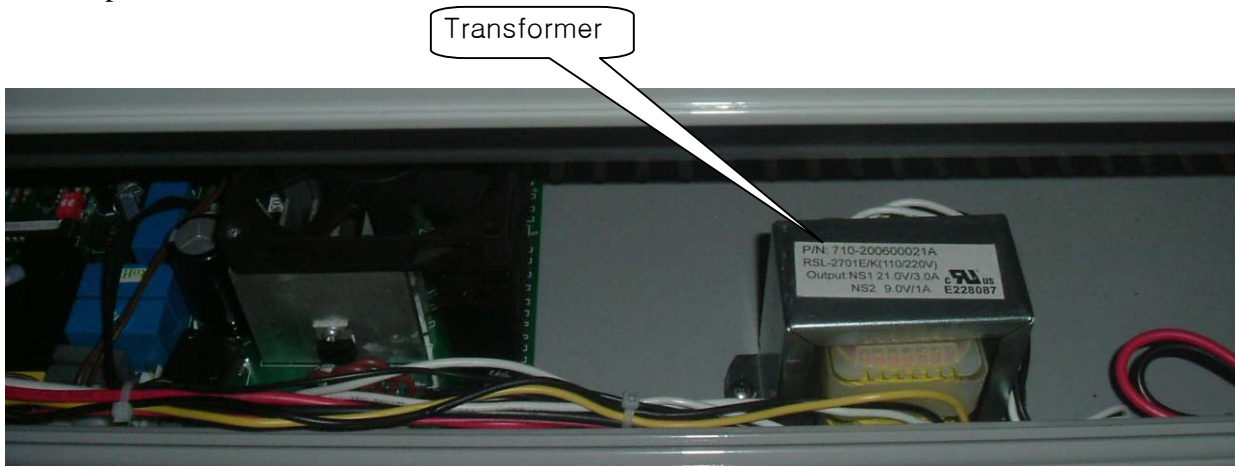
3. Disconnected main power wires.

- a. Check that the main power wires are properly connected.

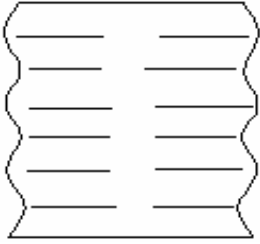
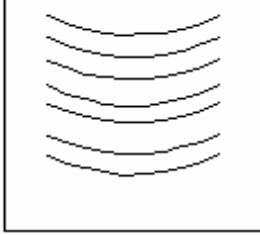
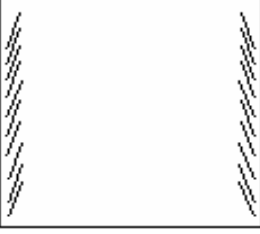
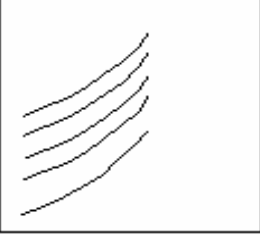
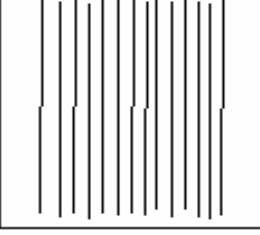
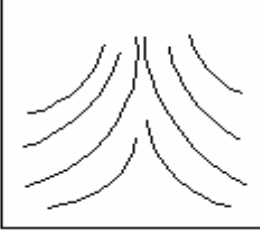
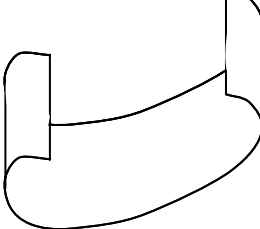


4. Transformer is defective

- a. Replace the transformer.



2.5 Poor Lamination Quality

<p>Problem: Straight wave lines across the output.</p> <p>Cause: Excessive front roller pressure.</p> <p>Measure: Loosen the front roller pressure.</p>	
<p>Problem: Concave waves in the lamination.</p> <p>Cause: Excessive rear (pulling) roller pressure.</p> <p>Measure: Loosen the rear back roller pressure.</p>	
<p>Problem: Angled waves on both sides of the output.</p> <p>Cause: Insufficient rear roller pressure.</p> <p>Measure: Tighten the rear roller pressure.</p>	
<p>Problem: Angled waves on one side of the output.</p> <p>Cause: Insufficient rear left (or right) side roller pressure.</p> <p>Measure: Tighten the rear left (or right) side roller pressure.</p>	
<p>Problem: Straight waves in the output.</p> <p>Cause: Excessive heat at the nip rollers.</p> <p>Measure: Lower the roller temperature.</p>	
<p>Problem: Wake waves.</p> <p>Cause: Insufficient heat at the nip rollers.</p> <p>Measure: Raise the roller temperature.</p>	
<p>Problem: Curling.</p> <p>Cause: 1.The film tension is very tight;2.The decurling bar is not in the working location.</p> <p>Measure: 1.Loose the tension;2.Adjust the decurling bar to working location.</p>	

3. Replacing Parts

Note: While replacing parts:

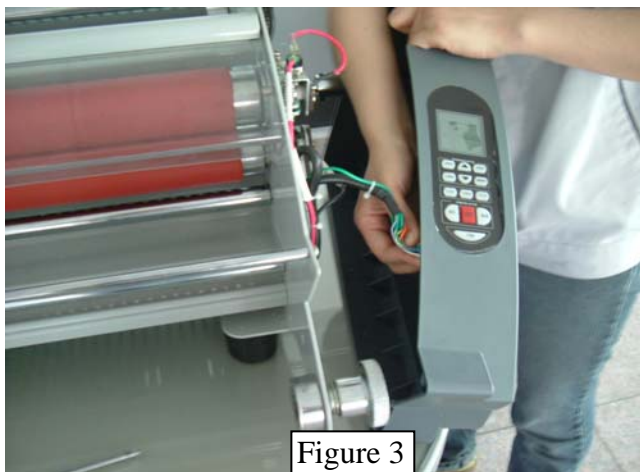
- a. Make sure the power plug is unplugged from the power outlet.*
- b. Open both side covers and rear cover.*

3.1 Replacing the Right Cover.

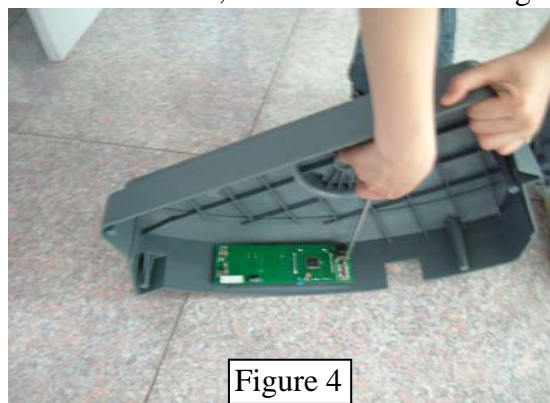
- a. Take out the pressure lever (Figure 1) and four cover screws using Phillips screw driver (Figure 2).



- b. Pull out the male control panel connector from the Sub-PCB (Figure 3) .



- c. Loosen two screws from Sub-PCB , installed on to new Right Cover (Figure 4).



- d. Follow the reverse order to assemble the Right Cover back.

3.2 Replacing the Left Cover

- a. Replace the Left Cover by loosening four Left Cover screws.

3.3 Replacing Rear Cover

- a. Take off the left and right covers.
- b. Take out the four screws from frames, two screws of each side (Figure 5, Figure 6)

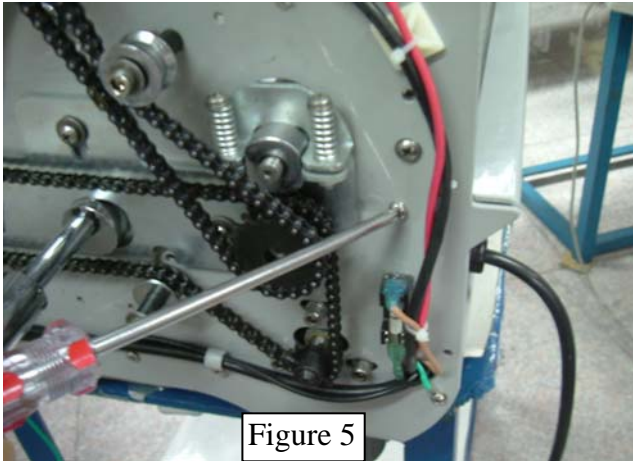
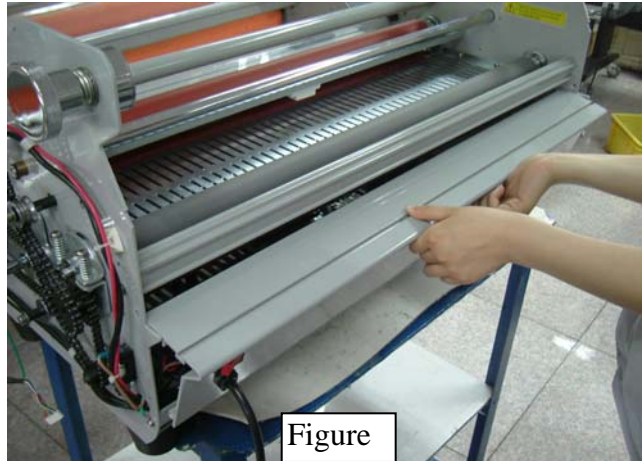


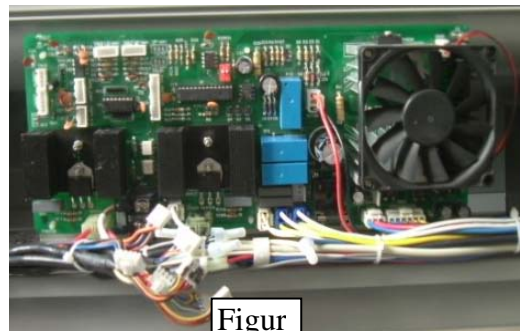
Figure 5



Figure

3.4 Replacing the Main PCB

- a. Remove the rear cover and label all the wires before unplugging from the Main PCB.
- b. Detach the Main PCB from 6 white plastic holders (Figure 7).
- c. Replace the board with new PCB and connect all the wires.



Figur

3.5 Replacing the Sub-PCB

- a. Refer to “Replacing Right Cover”.

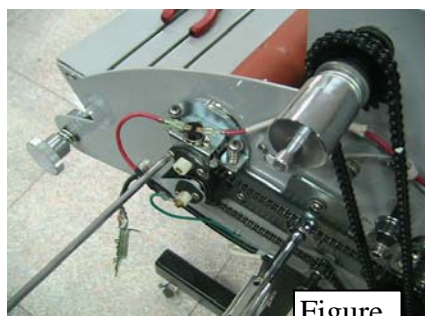
3.6 Replacing the Heaters

Note: Cotton or surgical gloves are recommended while handling the heater assembly.

- a. Disassemble Right and Left Covers (Refer to “Replacing Right Cover” and “Replacing Left Cover”).
- b. Take out the heater brackets on each side by loosening screws (Figure 8, 9, & 10).



Figure8



Figure

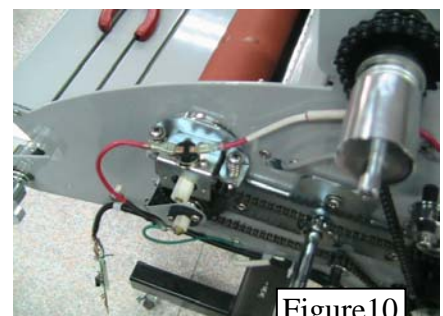
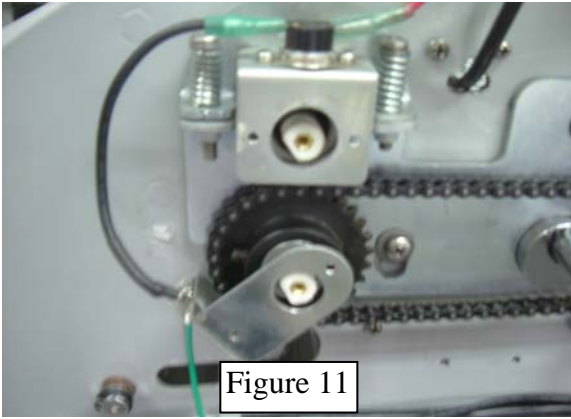


Figure10

c. Take out the broken heater. Figure 11



Note:

- a. When inserting the heater into the roller, rotate the heater slightly and push the rod in gently.
- b. Use an air blower to blow out the broken pieces of heating rod.
(Please ensure that no one is standing on the other side.)

3.7 Replacing the Cross Cutter

- a. Disassemble the nut from the Frame-Cutter.
- b. Unfasten the spring from the cutter.
- c. Change the Cutter.
- d. Assemble the Cutter by reversing the above steps.

4. Adjustments

4.1 Adjusting Take-up Shaft Speed

CAUSES:

1. Main rollers and take-up shaft speed is not synchronized.

MEASURES:

Adjust take-up shaft speed, by loosening or tightening the knob according to label-take up.

C.W – Tighten.

C.C.W – Loosen.



4.2 Adjusting front and rear rollers Pressure

• Use Screwdriver

to adjust the roller pressure:

C.W – Increase pressure.

C.C.W – Decrease pressure.

1. Using Push-Pull Scale, measure 5 spots as shown on Figure B & C: Front roller should be 5~6 and back rollers should be 6~8.

2. Checking for over all tension – when the machine is running, check that the top and the bottom films are fed in without any wrinkles.

3. Pressure mark checking (Heat Line) – stop the machine for 30 seconds to create a heat line. Then check to see if you have two even parallel lines from one end to other. Note: A narrow parallel lines indicate that it has less pressure at that point.

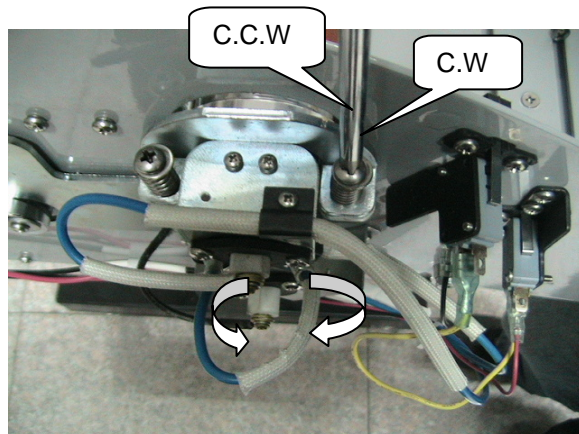


Figure A

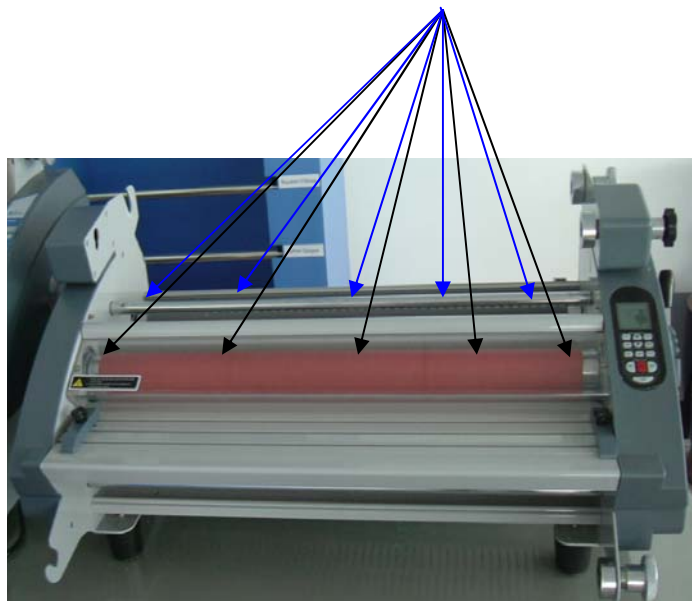


Figure B

4. Laminating Test – Laminate samples with different thickness of substrates.

5. Check above steps 2 through 4 with 3mil & 5mil films.



Figure C

5. Part list

RSL-2702S Part list

RSL-2702S

No.	Part No.	Part Name	Remark
1	013LR2012F	FRAME-SENSOR	
2	013LR2087A	FRAME-L	
3	013LR2088A	FRAME-R	
4	013LR3002K	FRAME-CUTTER	
5	013LR3009A	FRAME-REAR	
6	013LR3021A	PLATE-MIDDLE	
7	013LR3075A	BASE-FRONT	
8	013LR3076A	BASE-REAR	
9	013LR4004A	FRAME-COVER SAFETY	
10	014LR3001A	TABLE-FRONT	
11	015LR2001B	IDLE BAR LOW	
12	015LR3011A	IDLE-BAR	
13	015LR3012A	SHAFT-DECURLING	
14	021CR3001A	KNOB-CUTTER,C	
15	021LR0001A	COVER-L	
16	021LR2008A	COVER-TAKE UP,L	
17	021LR2013A	COVER-TAKE UP,R	
18	ASMLR1602A	ASM-SENSOR	
19	ASMLR1608A	ASM-SENSOR	
20	021LR3018A	COVER-R	
21	021LR3024B	COVER-SAFETY	
22	021LR4001A	LIMIT SWITCH COVER	
23	023LR3005A	BUTTON-FUNC	
24	023LR4002A	KNOB-BOLT GUIDE	
25	023LR4004A	KNOB-TENSION	
26	023LR4007A	KNOB-LEVEL	
27	026LR4006A	FOOT	
28	032LR3002A	SHEET-FUNC	
29	111LR4004A	BOLT-CORE	
30	111LR4006A	BOLT-GUIDE	
31	111LR4018A	SCREW-H	
32	112004001D	NUT	
33	120LR3004G	SHAFT-FILM,L	
34	120LR3023A	SHAFT-CAM	
35	120LR4008A	SHAFT-TABLE	
36	120LR4014A	SHAFT-TAKE UP	
37	12200X005A	BEARING-TRUST NEEDLE	
38	12200X009A	DU BUSH	
39	12200X022A	BEARING-RADIAL TRUST	
40	12200X027A	DU BUSH	
41	12200X028A	DU BUSH	
42	12200X029A	DU BUSH	
43	12200X030A	DU BUSH	
44	12200X032A	DU BUSH	
45	12200X034A	DU BUSH	
46	12200X040A	DU BUSH	
47	122LR4024A	BUSH-ROLLER LAMI,UP	
48	122LR4026A	BUSH-ROLLER PULL,UP	
49	122LR4042A	BUSH-ROLLER LAMI,LO-LEFT	
50	122LR4047A	BUSH-ROLLER PULL,LO	

51	122LR4050A	BUSH-ROLLER LAMI,LO-RIGHT ASS'Y	
52	124LR4005A	CAM	
53	124LR4006A	1"CORE	
54	125LR4001A	HANDLE-TENSION	
55	125LR4003B	LEVER-PRESSURE	
56	125LR4004A	SHAFT-TENSION 2	
57	125LR4008A	SUPPORT-SPRING	
58	131LR4017A	SPROCKET-LAMI	
59	131LR4022B	SPROCKET-DOUBLE	
60	131LR4023A	SPROCKET-TAKE UP	
61	131LR4034A	SPROCKET-MOTOR	
62	133LR2021A	ROLLER-LAMI,LO	
63	133LR2021B	ROLLER-LAMI,UP	
64	133LR2022A	ROLLER-PULL,LO	
65	133LR2022B	ROLLER-PULL,UP	
66	134LR4001A	PULLEY-CHAIN	
67	134LR4003A	BUSH-PULLEY	
68	136LR4001C	CHAIN	
69	136LR4001G	CHAIN-2(TAKE UP)	
70	138LR4001A	SPRING-CUTTER CROSS	
71	138LR4012A	SPRING-TENSION	
72	138LR4015A	SPRING-PRESSURE	
73	138LR4018A	SPRING-LEVER	
74	140LR3001A	HOLDER-CUTTER,C	
75	140LR4001A	HOLDER-SHAFT FILM	
76	140LR4021A	HOLDER-SHAFT,T	
77	141LP4018A	BRACKET-T/FUSE	
78	141LR3017A	PLATE-PRESSURE,L	
79	141LR3018A	PLATE-PRESSURE,R	
80	141LR4005A	PLATE-SHAFT FILM	
81	141LR4020A	BRACKET-HEATER,LO-R	
82	141LR4035A	PLATE-DU BUSH	
83	141LR4040A	PLATE-SLIP	
84	141LR4041A	BRACKET-FAN	
85	141LR4043A	FRONT TABLE SAFETY LEVER	
86	141LR4054A	BRACKET-LIMIT SWITCH	
87	141LR4059A	BRACKET-SENSOR	
88	141LR4060A	PLATE-PRESSURE,LAMI	
89	141LR4061A	PLATE-PRESSURE,PULL	
90	141LR4081A	BRACKET-HEATER,LO-L	
91	141LR4087A	BRACKET-HEATER,UP	
92	143LR3001A	SUPPORTER-SHAFT	
93	144LR4001B	CLAMPER-LEVER	
94	145LR3002A	GUIDE-DOCUMENT	
95	147LR4002A	PAD-TENSION	
96	147LR4010A	PAD-TAKE UP	
97	147LR4013A	STOPPER-HEATER,UP	
98	210004002A	MOTOR-MAIN	
99	211003004A	FAN	
99-1	211003004B	FAN	
100	213LR4001A	CUTTER-CROSS	
101	223LR2007B	HEATER ASS'Y	
101-1	223LR2007C	HEATER ASS'Y	
101-2	223LR2007D	HEATER ASS'Y	
101-3	223LR2007F	HEATER ASS'Y	

102	23200X002A	SUPPORT-PCB	
103	23300X001A	BUSHING-CORD	
104	32500X0005	FUSE-MAIN	
104-1	32500X0008	FUSE-MAIN	
105	34000S011A	POWER TRANSFORMER	
106	350LR3022A	PCB-SUB ASS'Y	
107	350LR3036C	PCB-MAIN ASS'Y	
108	363LP3001A	BI-METAL LO	
109	363LR4001F	BI-METAL UP	
110	36400X002B	SWITCH-MAIN	
111	36400X014B	MICRO S/W	
112	36600X001A	FUSE-HOLDER	
113	380CR4003A	POWER CORD	
113-1	380CR4004A	POWER CORD	
113-2	380LR4001A	POWER CORD	
113-3	380LR4001B	POWER CORD	
113-4	380LR4003A	POWER CORD	
113-5	380LR4007A	POWER CORD	
114	381LR4013C	WIRE-POWER S/W	
115	381LR4020B	WIRE-FUSE,EU	
116	381LR4030D	WIRE-UP HEATER1,EU	
117	381LR4043A	WIRE-SAFETY S/W	
118	381LR4044A	WIRE-MAIN	
119	381LR4052A	WIRE-MOTOR	
120	381LR4054A	WIRE-LO HEATER2,EU	
121	381LR4055A	WIRE-UP HEATER2,EU	
122	381LR4084A	WIRE-T/FUSE(UP)	
123	381LR4091A	WIRE-LO HEATER1,EU	
124	381LR4092A	WIRE-T/FUSE(LO)	
125	443LR4001A	L-WRENCH	
126	ASMLR1339A	ASM-AUTO GRIP FILM CORE 2"	
126-1	ASMLR1339B	ASM-AUTO GRIP FILM CORE3"	
127	KPS03012D2	KEY-PLAIN	
128	KPS05010D2	KEY-PLAIN	
129	RE001000C8	E-RING	
130	RC001200C8	SNAP-RING	
131	RIV05018E8	RIVET	
132	SKE04010D2	SET SCREW	
132-1	SKE05006D2	SET SCREW	
132-2	SKE05010D2	SET SCREW	
132-3	SKE05015D2	SET SCREW	
133	013LR4010A	FRAME-GUIDE, R	
134	013LR4011A	FRAME-GUIDE, L	
135	141LR4127A	BRACKET-DECURLING BAR, R	
136	141LR4128A	BRACKET-DECURLING BAR, L	
137	111LR4022A	KNOB-GUIDE	

5. Part list

RSL-382S Part list

RSL-382S

No.	Part No.	Part Name	Remark
1	013LR2012G	FRAME-SENSOR	
2	013LR2087A	FRAME-L	
3	013LR2088A	FRAME-R	
4	013LR3002H	FRAME-CUTTER	
5	013LR3035A	FRAME-REAR	
6	013LR3036A	PLATE-MIDDLE	
7	013LR3069A	BASE-FRONT	
8	013LR3070A	BASE-REAR	
9	013LR4004A	FRAME-COVER SAFETY	
10	014LR3001B	TABLE-FRONT	
11	015LR2010A	IDLE BAR LOW	
12	015LR3011B	IDLE-BAR	
13	015LR3012B	SHAFT-DECURLING	
14	021CR3001A	KNOB-CUTTER,C	
15	021LR0001A	COVER-L	
16	021LR2008A	COVER-TAKE UP,L	
17	021LR2013A	COVER-TAKE UP,R	
18	ASMLR1604A	ASM-SENSOR	
19	ASMLR1608A	ASM-SENSOR	
20	021LR3018A	COVER-R	
21	021LR3024A	COVER-SAFETY	
22	021LR4001A	LIMIT SWITCH COVER	
23	023LR3005A	BUTTON-FUNC	
24	023LR4002A	KNOB-BOLT GUIDE	
25	023LR4004A	KNOB-TENSION	
26	023LR4010A	KNOB-LEVEL	
27	026LR4006A	FOOT	
28	032LR3002A	SHEET-FUNC	
29	111LR4004A	BOLT-CORE	
30	111LR4006A	BOLT-GUIDE	
31	111LR4018A	SCREW-H	
32	112004001D	NUT	
33	120LR3004E	SHAFT-FILM,L	
34	120LR3031B	SHAFT-CAM	
35	120LR4008A	SHAFT-TABLE	
36	120LR4014C	SHAFT-TAKE UP	
37	12200X005A	BEARING-TRUST NEEDLE	
38	12200X009A	DU BUSH	
39	12200X022A	BEARING-RADIAL TRUST	
40	12200X027A	DU BUSH	
41	12200X028A	DU BUSH	
42	12200X029A	DU BUSH	
43	12200X030A	DU BUSH	
44	12200X032A	DU BUSH	
45	12200X034A	DU BUSH	
46	12200X040A	DU BUSH	
47	122LR4024A	BUSH-ROLLER LAMI,UP	
48	122LR4026A	BUSH-ROLLER PULL,UP	
49	122LR4042A	BUSH-ROLLER LAMI,LO-LEFT	
50	122LR4047A	BUSH-ROLLER PULL,LO	

51	122LR4050A	BUSH-ROLLER LAMI,LO-RIGHT ASS'Y	
52	124LR4005A	CAM	
53	124LR4006A	1"CORE	
54	125LR4001A	HANDLE-TENSION	
55	125LR4003B	LEVER-PRESSURE	
56	125LR4004A	SHAFT-TENSION 2	
57	125LR4008A	SUPPORT-SPRING	
58	131LR4017A	SPROCKET-LAMI	
59	131LR4022B	SPROCKET-DOUBLE	
60	131LR4023A	SPROCKET-TAKE UP	
61	131LR4034A	SPROCKET-MOTOR	
62	133LR3001A	ROLLER-LAMI	
64	133LR3002A	ROLLER-PULL	
66	134LR4001A	PULLEY-CHAIN	
67	134LR4003A	BUSH-PULLEY	
68	136LR4001C	CHAIN	
69	136LR4001G	CHAIN-2(TAKE UP)	
70	138LR4001A	SPRING-CUTTER CROSS	
71	138LR4012A	SPRING-TENSION	
72	138LR4015A	SPRING-PRESSURE	
73	138LR4018A	SPRING-LEVER	
74	140LR3001A	HOLDER-CUTTER,C	
75	140LR4001A	HOLDER-SHAFT FILM	
76	140LR4021A	HOLDER-SHAFT,T	
77	141LP4018A	BRACKET-T/FUSE	
78	141LR3017A	PLATE-PRESSURE,L	
79	141LR3018A	PLATE-PRESSURE,R	
80	141LR4005A	PLATE-SHAFT FILM	
81	141LR4020A	BRACKET-HEATER,LO-R	
82	141LR4035A	PLATE-DU BUSH	
83	141LR4040A	PLATE-SLIP	
85	141LR4043A	FRONT TABLE SAFETY LEVER	
86	141LR4054A	BRACKET-LIMIT SWITCH	
87	141LR4059A	BRACKET-SENSOR	
88	141LR4060A	PLATE-PRESSURE,LAMI	
89	141LR4061A	PLATE-PRESSURE,PULL	
90	141LR4081A	BRACKET-HEATER,LO-L	
91	141LR4087A	BRACKET-HEATER,UP	
92	143LR3001A	SUPPORTER-SHAFT	
93	144LR4001B	CLAMPER-LEVER	
94	145LR3002A	GUIDE-DOCUMENT	
95	147LR4002A	PAD-TENSION	
96	147LR4010A	PAD-TAKE UP	
97	147LR4013A	STOPPER-HEATER,UP	
98	210004002A	MOTOR-MAIN	
100	213LR4001A	CUTTER-CROSS	
101	223LR3001H	HEATER ASS'Y	
101-1	223LR3001J	HEATER ASS'Y	
102	23200X001A	SUPPORT-PCB	
103	23300X001A	BUSHING-CORD	
104	32500X0008	FUSE-MAIN	
105	34000S011A	POWER TRANSFORMER	
106	350LR3022A	PCB-SUB ASS'Y	
107	350LR3036C	PCB-MAIN ASS'Y	
108	363LP4013A	BI-METAL UP	

109	033LR4002A	WASHER-BI METAL	
110	36400X002B	SWITCH-MAIN	
111	36400X014B	MICRO S/W	
112	36600X001A	FUSE-HOLDER	
113	380LR4001A	POWER CORD	
113-1	380LR4003A	POWER CORD	
113-2	380LR4007A	POWER CORD	
114	381LR4013J	WIRE-POWER S/W	
115	381LR4020B	WIRE-FUSE,EU	
116	381LR4030D	WIRE-UP HEATER1,EU	
118	381LR4044B	WIRE-MAIN	
119	381LR4052A	WIRE-MOTOR	
120	381LR4054A	WIRE-LO HEATER2,EU	
121	381LR4055A	WIRE-UP HEATER2,EU	
122	381LR4084A	WIRE-T/FUSE(UP)	
123	381LR4091A	WIRE-LO HEATER1,EU	
124	381LR4092B	WIRE-T/FUSE(LO)	
125	443LR4001A	L-WRENCH	
126	ASMLR1339A	ASM-AUTO GRIP FILM CORE 2"	
126-1	ASMLR1339B	ASM-AUTO GRIP FILM CORE3"	
127	KPS03012D2	KEY-PLAIN	
128	KPS05010D2	KEY-PLAIN	
129	RC001200C8	SNAP-RING	
130	RE001000C8	E-RING	
131	RIV05018E8	RIVET	
132	SKE04010D2	SET SCREW	
132-1	SKE05006D2	SET SCREW	
132-2	SKE05010D2	SET SCREW	
132-3	SKE05015D2	SET SCREW	
133	013LR4010A	FRAME-GUIDE, R	
134	013LR4011A	FRAME-GUIDE, L	
135	141LR4127A	BRACKET-DECURLING BAR, R	
136	141LR4128A	BRACKET-DECURLING BAR, L	
137	111LR4022A	KNOB-GUIDE	

6. Explode View

Explode View

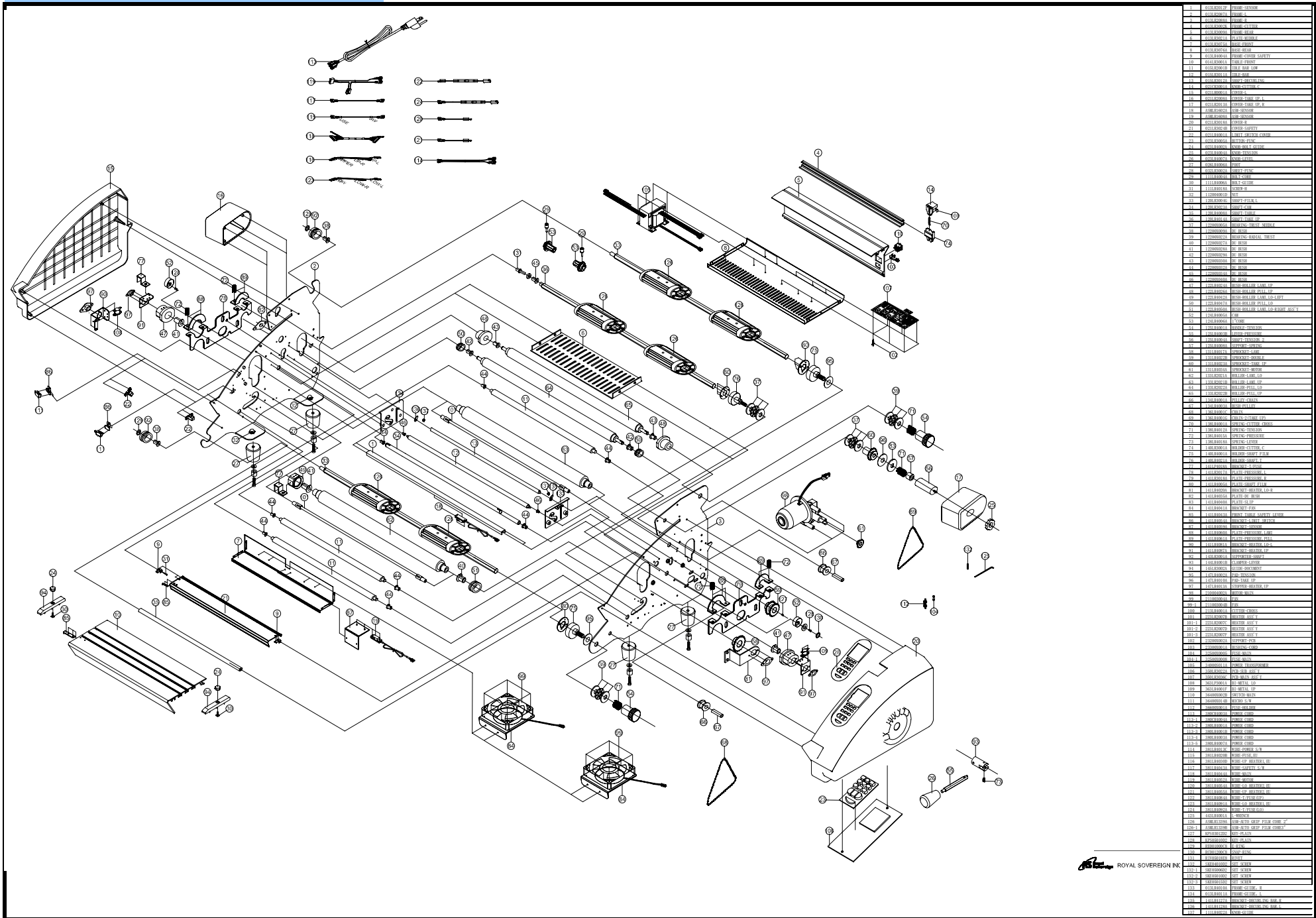
Frame L

Frame R

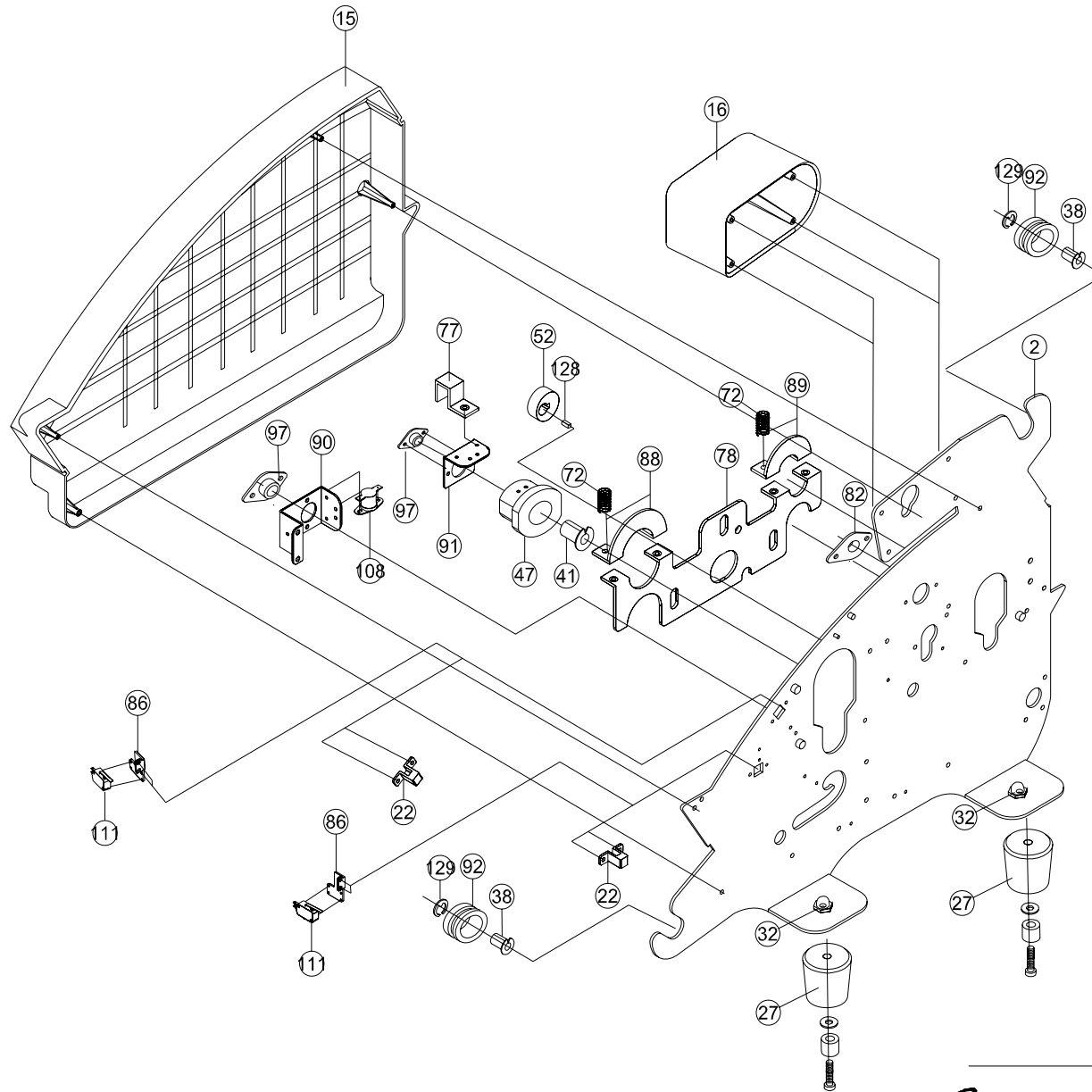
Frame, Roller and Other View

Wire, Front Table ,Film Shaft and Control PCB

RSL-2702S Explode View

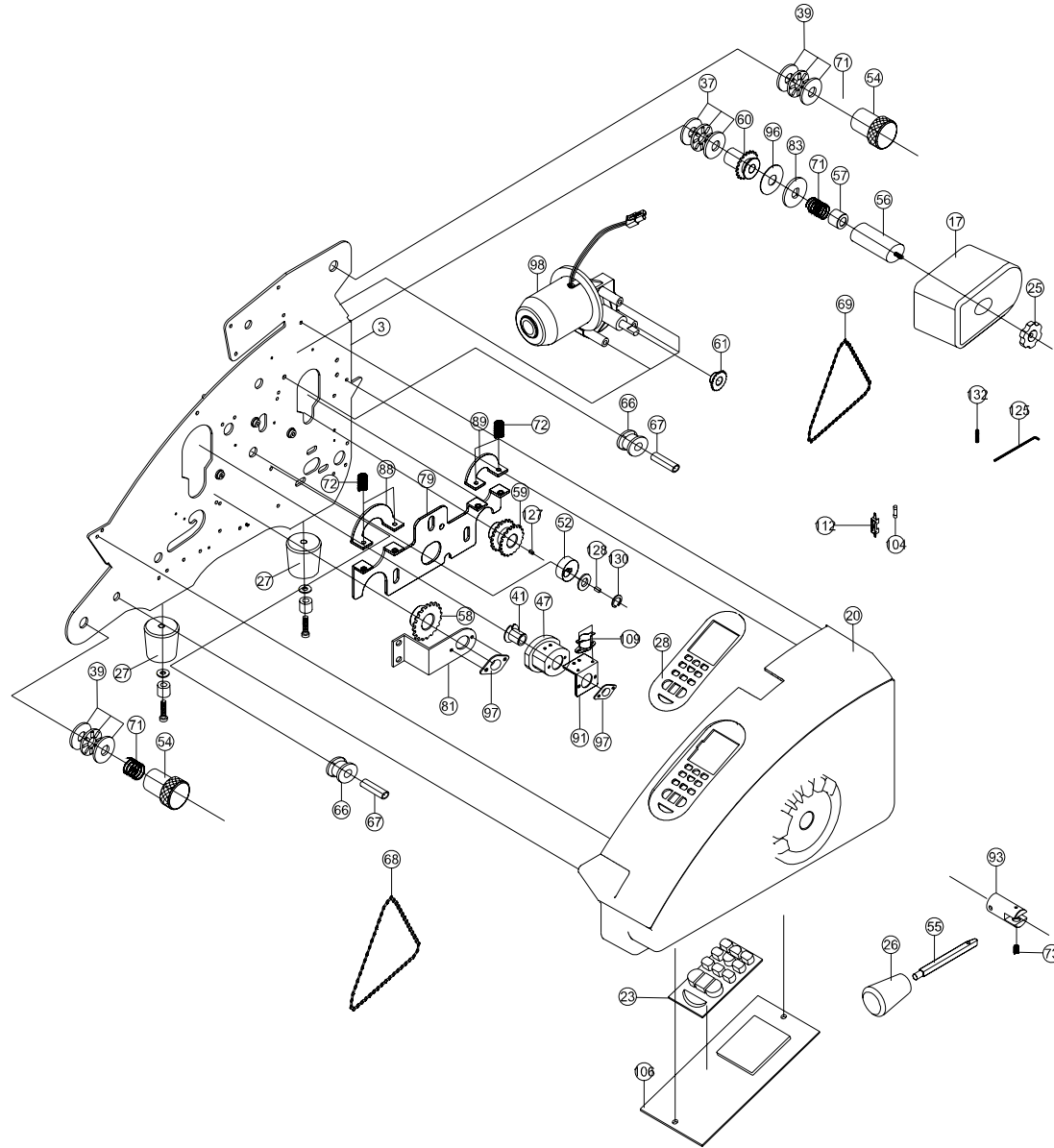


Frame - L



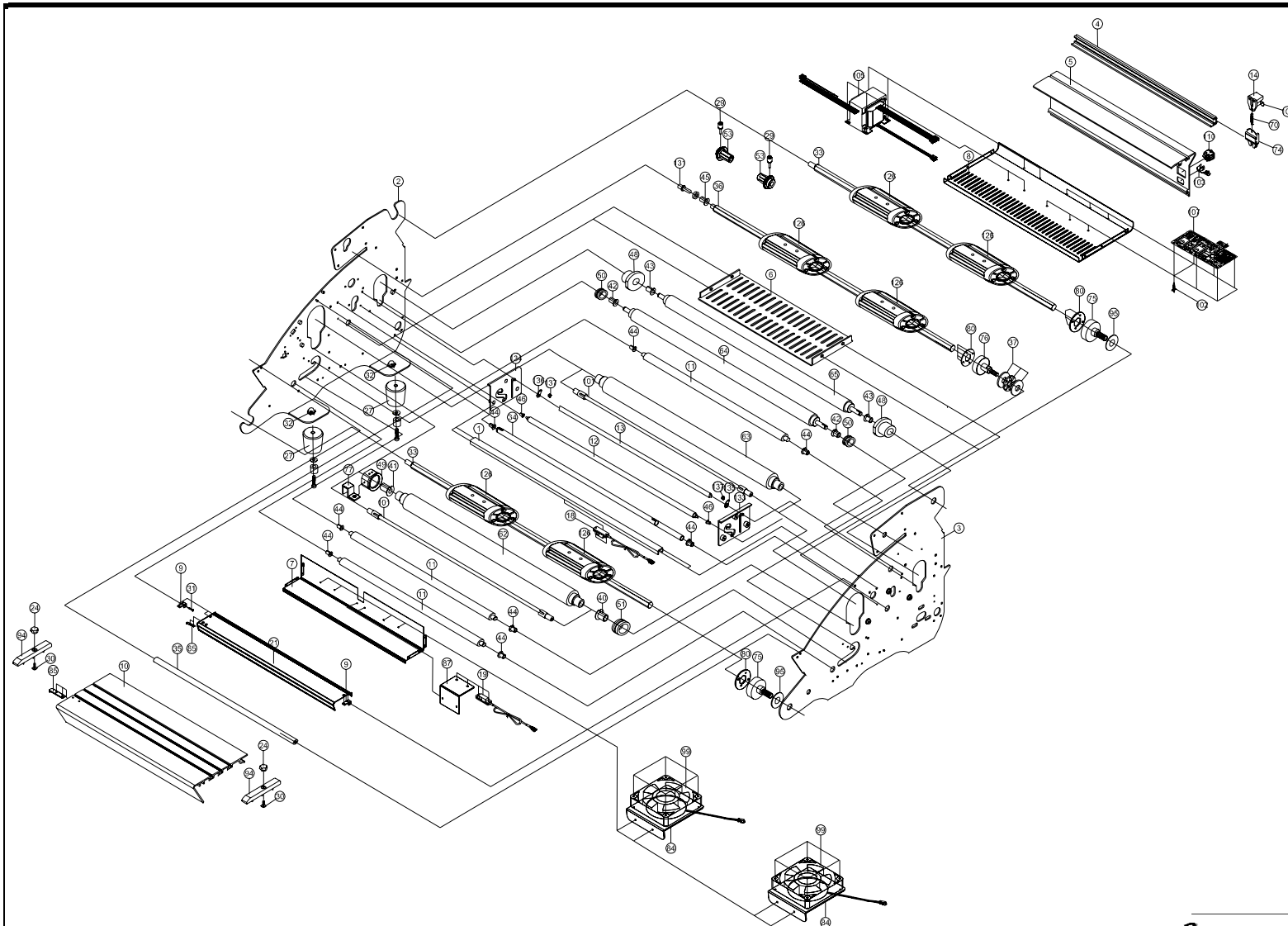
2	013LR2087A	FRAME-L
15	021LR0001A	COVER-L
16	021LR2008A	COVER-TAKE UP, L
22	021LR4001A	LIMIT SWITCH COVER
27	026LR4006A	FOOT
32	112004001D	NUT
38	12200X009A	DU BUSH
41	12200X028A	DU BUSH
47	122LR4024A	BUSH-ROLLER LAMI, UP
52	124LR4005A	CAM
72	138LR4015A	SPRING-PRESSURE
77	141LP4018A	BRACKET-T/FUSE
78	141LR3017A	PLATE-PRESSURE, L
82	141LR4035A	PLATE-DU BUSH
86	141LR4054A	BRACKET-LIMIT SWITCH
88	141LR4060A	PLATE-PRESSURE, LAMI
89	141LR4061A	PLATE-PRESSURE, PULL
90	141LR4081A	BRACKET-HEATER, LO-L
91	141LR4087A	BRACKET-HEATER, UP
92	143LR3001A	SUPPORTER-SHAFT
97	147LR4013A	STOPPER-HEATER, UP
108	363LP3001A	BI-METAL LO
111	36400X014B	MICRO S/W
128	KPS05010D2	KEY-PLAIN
129	RE001000C8	E-RING

Frame - R



3	013LR2088A	FRAME-R
17	021LR2013A	COVER-TAKE UP, R
20	021LR3018A	COVER-R
23	023LR3005A	BUTTON-FUNC
25	023LR4004A	KNOB-TENSION
26	023LR4007A	KNOB-LEVEL
27	026LR4006A	FOOT
37	12200X005A	BEARING-TRUST NEEDLE
39	12200X022A	BEARING-RADIAL TRUST
41	12200X028A	DU BUSH
47	122LR4024A	BUSH-ROLLER LAMI, UP
52	124LR4005A	CAM
54	125LR4001A	HANDLE-TENSION
55	125LR4003B	LEVER-PRESSURE
56	125LR4004A	SHAFT-TENSION 2
57	125LR4008A	SUPPORT-SPRING
58	131LR4017A	SPROCKET-LAMI
59	131LR4022B	SPROCKET-DOUBLE
60	131LR4023A	SPROCKET-TAKE UP
61	131LR4034A	SPROCKET-MOTOR
66	134LR4001A	PULLEY-CHAIN
67	134LR4003A	BUSH-PULLEY
68	136LR4001C	CHAIN
69	136LR4001G	CHAIN-2 (TAKE UP)
71	138LR4012A	SPRING-TENSION
72	138LR4015A	SPRING-PRESSURE
73	138LR4018A	SPRING-LEVER
79	141LR3018A	PLATE-PRESSURE, R
81	141LR4020A	BRACKET-HEATER, LO-R
83	141LR4040A	PLATE-SLIP
88	141LR4060A	PLATE-PRESSURE, LAMI
89	141LR4061A	PLATE-PRESSURE, PULL
91	141LR4087A	BRACKET-HEATER, UP
93	144LR4001B	CLAMPER-LEVER
96	147LR4010A	PAD-TAKE UP
97	147LR4013A	STOPPER-HEATER, UP
98	210004002A	MOTOR-MAIN
104	32500X0005	FUSE-MAIN
104-1	32500X0008	FUSE-MAIN
106	350LR3022A	PCB-SUB ASS'Y
109	363LR4001F	BI-METAL UP
112	36600X001A	FUSE-HOLDER
125	443LR4001A	L-WRENCH
127	KPS03012D2	KEY-PLAIN
128	KPS05010D2	KEY-PLAIN
130	RC001200C8	SNAP-RING
132	SKE04010D2	SET SCREW
132-1	SKE05006D2	SET SCREW
132-2	SKE05010D2	SET SCREW
132-3	SKE05015D2	SET SCREW

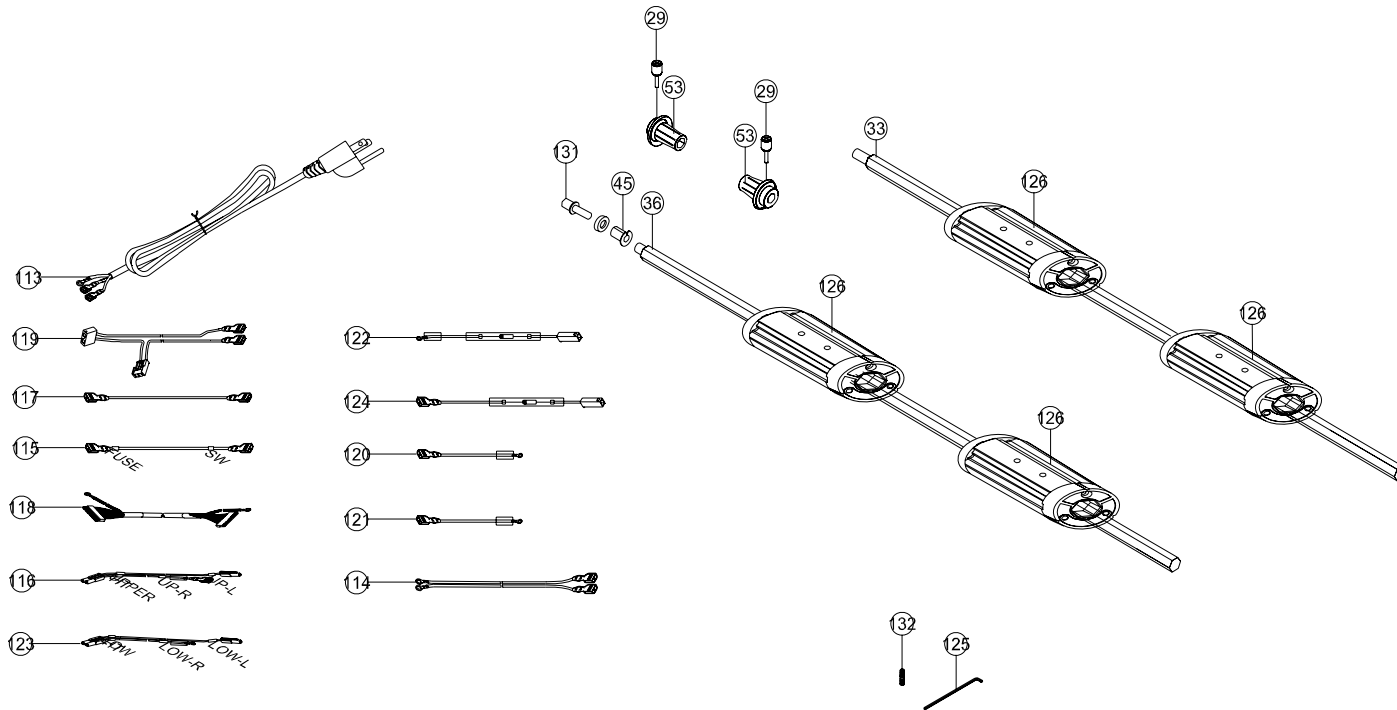
Frame, Roller and Other View



1	013LR2012F	FRAME-SENSOR
2	013LR2087A	FRAME-L
3	013LR2088A	FRAME-R
4	013LR3002K	FRAME-CUTTER
5	013LR3009A	FRAME-REAR
6	013LR3021A	PLATE-MIDDLE
7	013LR3075A	BASE-FRONT
8	013LR3076A	BASE-REAR
9	013LR4004A	FRAME-COVER SAFETY
10	014LR3001A	TABLE-FRONT
11	015LR2001B	IDLE BAR LOW
12	015LR3011A	IDLE-BAR
13	015LR3012A	SHAFT-DECURLING
14	021CB3001A	KNOB-CUTTER C
18	ASMR1602A	ASM-SENSOR
19	ASMR1608A	ASM-SENSOR
21	021LR3024B	COVER-SAFETY
24	023LR4002A	KNOB-BOLT GUIDE
27	026LR4006A	FOOT
28	032LR3002A	SHEET-FUNC
29	111LR4004A	BOLT-CORE
30	111LR4006A	BOLT-GUIDE
31	111LR4018A	SCREW-H
32	112004001D	NUT
33	120LR3004G	SHAFT-FILM L
34	120LR3023A	SHAFT-CAM
35	120LR4008A	SHAFT-TABLE
36	120LR4014A	SHAFT-TAKE UP
37	12200X005A	BEARING-TRUST NEEDLE
40	12200X027A	DU BUSH
42	12200X029A	DU BUSH
43	12200X030A	DU BUSH
44	12200X032A	DU BUSH
45	12200X034A	DU BUSH
46	12200X040A	DU BUSH
48	122LR4026A	BUSH-ROLLER PULL, UP
49	122LR4042A	BUSH-ROLLER LAMI, LO-LEFT
50	122LR4047A	BUSH-ROLLER PULL, LO
51	122LR4050A	BUSH-ROLLER LAMI, LO-RIGHT ASS'Y
53	124LR4006A	1"CORE
62	133LR2021A	ROLLER-LAMI, LO
63	133LR2021B	ROLLER-LAMI, UP
64	133LR2022A	ROLLER-PULL, LO
65	133LR2022B	ROLLER-PULL, UP
70	138LR4001A	SPRING-CUTTER CROSS
74	140LR3001A	HOLDER-CUTTER, C
75	140LR4001A	HOLDER-SHAFT FILM
76	140LR4021A	HOLDER-SHAFT, T
80	141LR4005A	PLATE-SHAFT FILM
84	141LR4041A	BRACKET-FAN
85	141LR4043A	FRONT TABLE SAFETY LEVER
87	141LR4059A	BRACKET-SENSOR
94	145LR3002A	GUIDE-DOCUMENT
95	147LR4002A	PAD-TENSION
99	211003004A	FAN
99-1	211003004B	FAN
100	213LR4001A	CUTTER-CROSS
101	223LR2007B	HEATER ASS'Y
101-1	223LR2007C	HEATER ASS'Y
101-2	223LR2007D	HEATER ASS'Y
101-3	223LR2007F	HEATER ASS'Y
102	23200X002A	SUPPORT-PCB
103	23300X001A	BUSHING-CORD
105	34000S011A	POWER TRANSFORMER
107	350LR3036C	PCB-MAIN ASS'Y
110	36400X002B	SWITCH-MAIN
124	381LR4092A	WIRE-T/FUSE(LO)
126	ASMR1339A	ASM-AUTO GRIP FILM CORE 2"
126-1	ASMR1339B	ASM-AUTO GRIP FILM CORE3"
131	RIV05018E8	RIVET
133	013LR4010A	FRAME-GUIDE, R
134	013LR4011A	FRAME-GUIDE, L
135	141LR4127A	BRACKET-DECURLING BAR, R
136	141LR4128A	BRACKET-DECURLING BAR, L
137	111LR4022A	KNOB-GUIDE

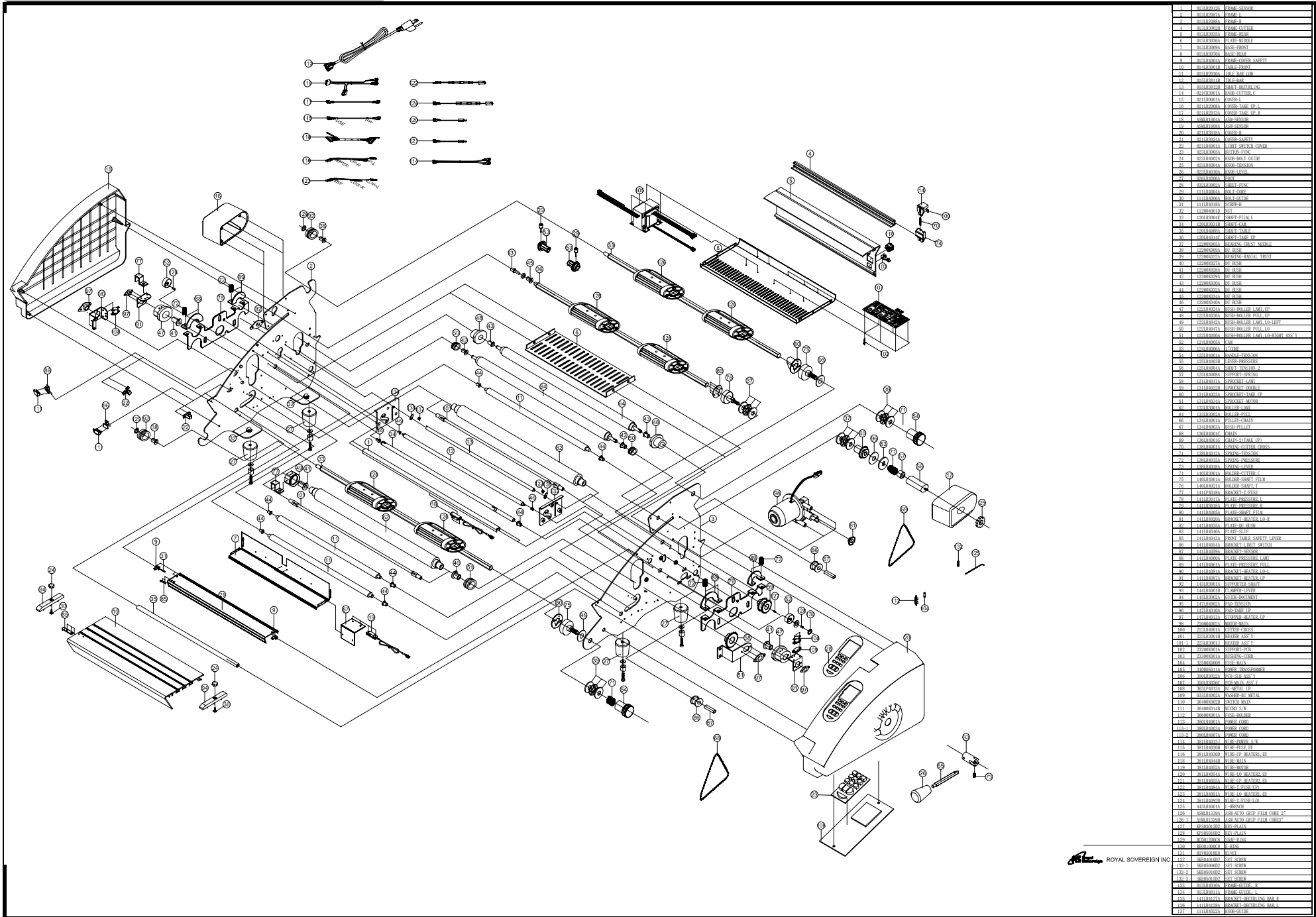


Wire, Film Shaft, Ass'y-Auto

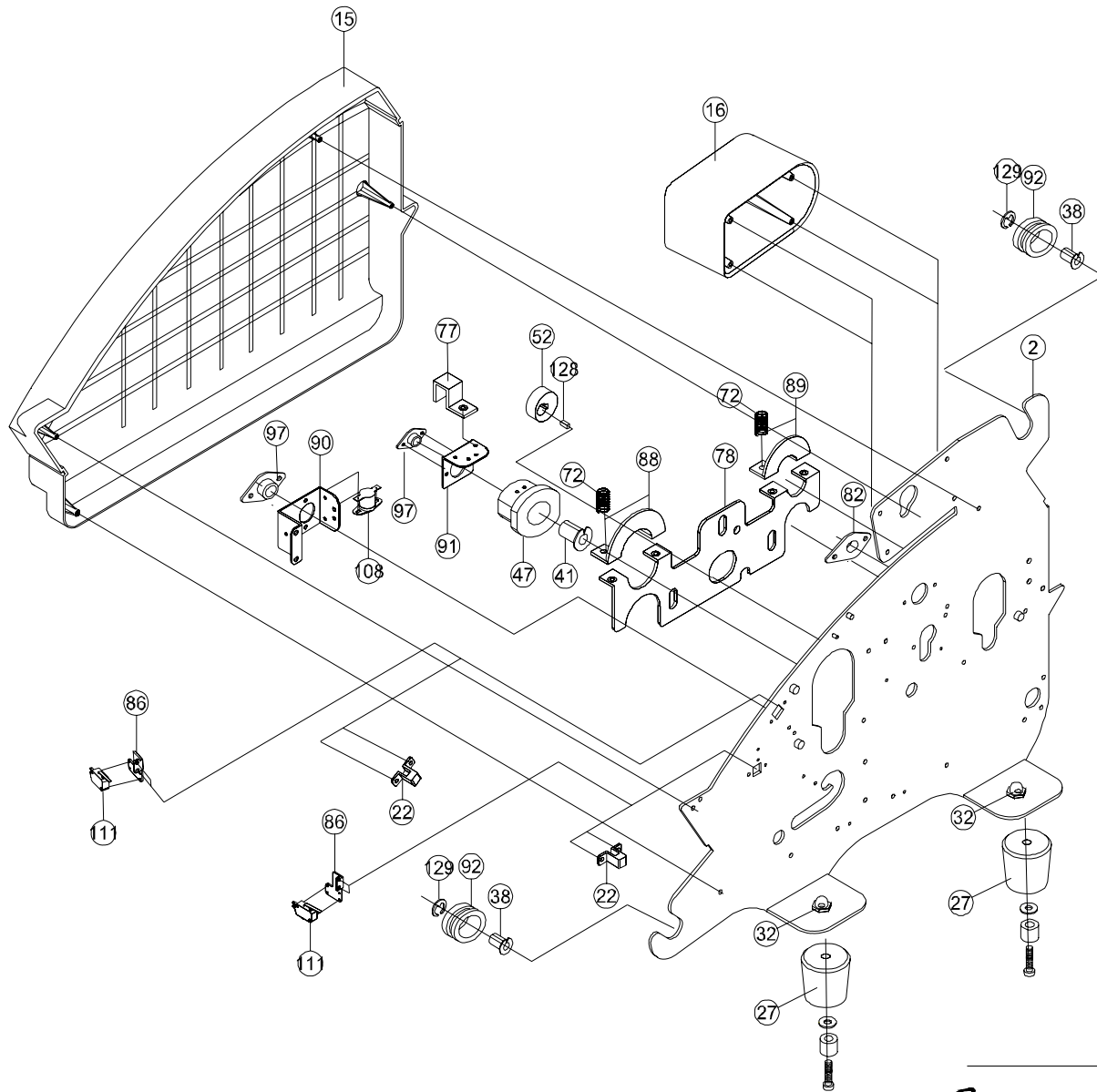


29	111LR4004A	BOLT-CORE
36	120LR4014A	SHAFT-TAKE UP
45	12200X034A	DU BUSH
53	124LR4006A	1" CORE
113	380CR4003A	POWER CORD
113-1	380CR4004A	POWER CORD
113-2	380LR4001A	POWER CORD
113-3	380LR4001B	POWER CORD
113-4	380LR4003A	POWER CORD
113-5	380LR4007A	POWER CORD
114	381LR4013C	WIRE-POWER S/W
115	381LR4020B	WIRE-FUSE, EU
116	381LR4030D	WIRE-UP HEATER1, EU
117	381LR4043A	WIRE-SAFETY S/W
118	381LR4044A	WIRE-MAIN
119	381LR4052A	WIRE-MOTOR
120	381LR4054A	WIRE-LO HEATER2, EU
121	381LR4055A	WIRE-UP HEATER2, EU
122	381LR4084A	WIRE-T/FUSE (UP)
123	381LR4091A	WIRE-LO HEATER1, EU
125	443LR4001A	L-WRENCH
126	ASMLR1339A	ASM-AUTO GRIP FILM CORE 2"
126-1	ASMLR1339B	ASM-AUTO GRIP FILM CORE3"
131	RIV05018E8	RIVET
132	SKE04010D2	SET SCREW
132-1	SKE05006D2	SET SCREW
132-2	SKE05010D2	SET SCREW
132-3	SKE05015D2	SET SCREW

RSL-382S Explode View

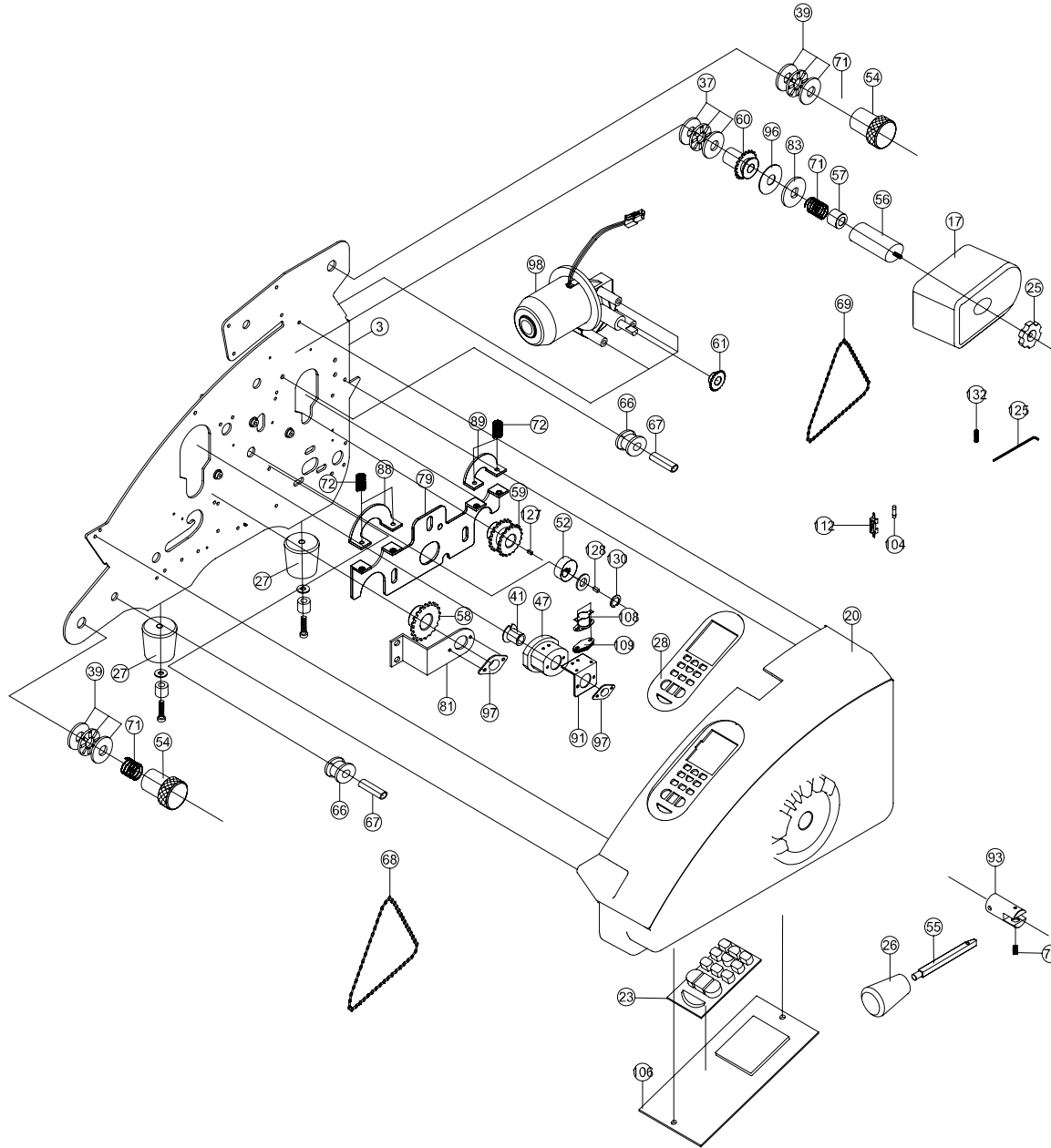


Frame - L



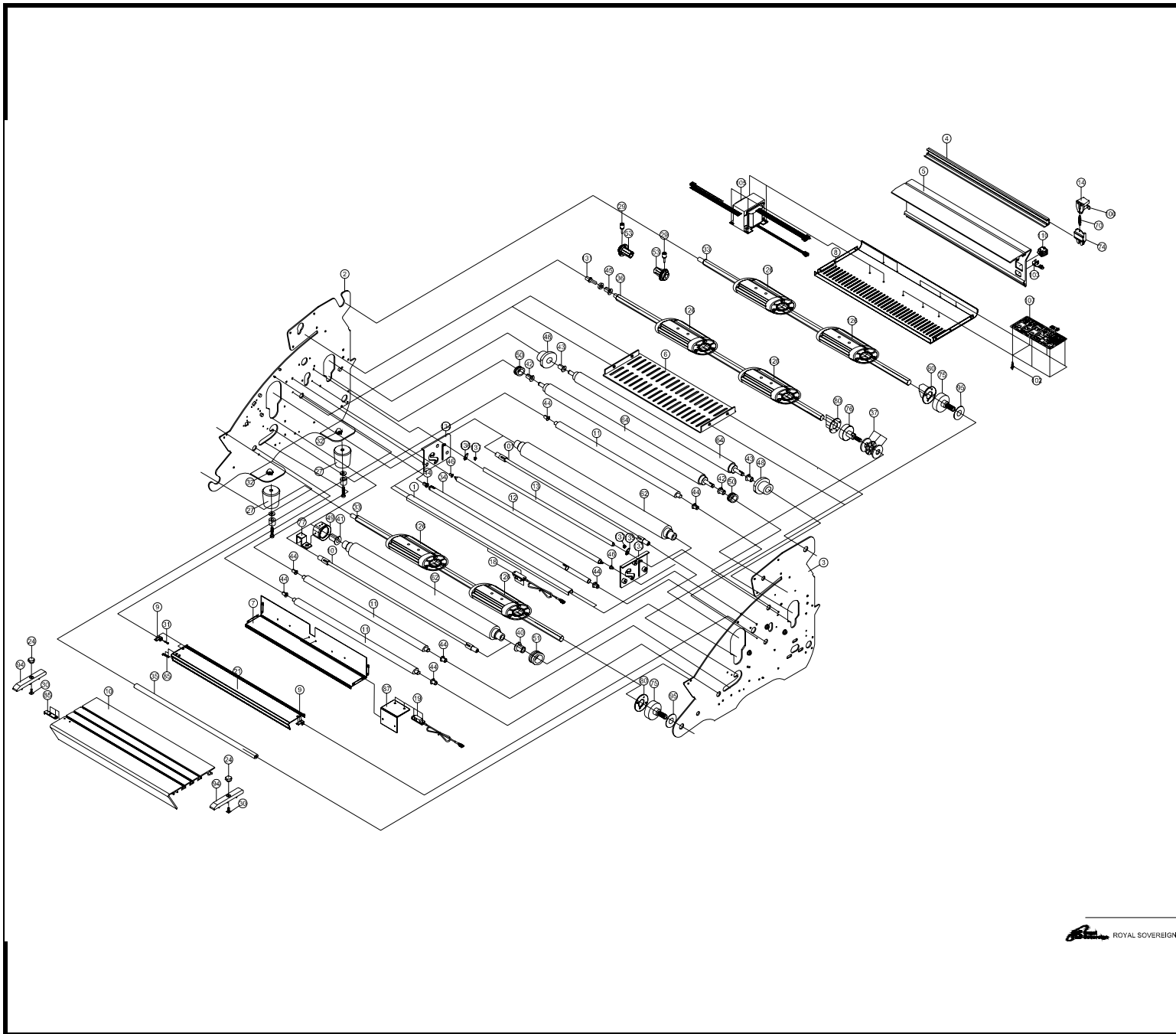
2	013LR2087A	FRAME-L
15	021LR0001A	COVER-L
16	021LR2008A	COVER-TAKE UP, L
22	021LR4001A	LIMIT SWITCH COVER
27	026LR4006A	FOOT
32	112004001D	NUT
38	12200X009A	DU BUSH
41	12200X028A	DU BUSH
47	122LR4024A	BUSH-ROLLER LAMI, UP
52	124LR4005A	CAM
72	138LR4015A	SPRING-PRESSURE
77	141LP4018A	BRACKET-T/FUSE
78	141LR3017A	PLATE-PRESSURE, L
82	141LR4035A	PLATE-DU BUSH
86	141LR4054A	BRACKET-LIMIT SWITCH
88	141LR4060A	PLATE-PRESSURE, LAMI
89	141LR4061A	PLATE-PRESSURE, PULL
90	141LR4081A	BRACKET-HEATER, LO-L
91	141LR4087A	BRACKET-HEATER, UP
92	143LR3001A	SUPPORTER-SHAFT
97	147LR4013A	STOPPER-HEATER, UP
108	363LP4013A	BI-METAL UP
111	36400X014B	MICRO S/W
128	KPS05010D2	KEY-PLAIN
129	RC001200C8	SNAP-RING

Frame - R



3	013LR2088A	FRAME-R
17	021LR2013A	COVER-TAKE UP, R
20	021LR3018A	COVER-R
23	023LR3005A	BUTTON-FUNC
25	023LR4004A	KNOB-TENSION
26	023LR4010A	KNOB-LEVEL
27	026LR4006A	FOOT
37	1220X005A	BEARING-TRUST NEEDLE
39	1220X022A	BEARING-RADIAL TRUST
41	1220X028A	DU BUSH
47	122LR4024A	BUSH-ROLLER LAMI, UP
52	124LR4005A	CAM
54	125LR4001A	HANDLE-TENSION
55	125LR4003B	LEVER-PRESSURE
56	125LR4004A	SHAFT-TENSION 2
57	125LR4008A	SUPPORT-SPRING
58	131LR4017A	SPROCKET-LAMI
59	131LR4022B	SPROCKET-DOUBLE
60	131LR4023A	SPROCKET-TAKE UP
61	131LR4034A	SPROCKET-MOTOR
66	134LR4001A	PULLEY-CHAIN
67	134LR4003A	BUSH-PULLEY
68	136LR4001C	CHAIN
69	136LR4001G	CHAIN-2 (TAKE UP)
71	138LR4012A	SPRING-TENSION
72	138LR4015A	SPRING-PRESSURE
73	138LR4018A	SPRING-LEVER
79	141LR3018A	PLATE-PRESSURE, R
81	141LR4020A	BRACKET-HEATER, LO-R
83	141LR4040A	PLATE-SLIP
88	141LR4060A	PLATE-PRESSURE, LAMI
89	141LR4061A	PLATE-PRESSURE, PULL
91	141LR4087A	BRACKET-HEATER, UP
93	144LR4001B	CLAMPER-LEVER
96	147LR4010A	PAD-TAKE UP
97	147LR4013A	STOPPER-HEATER, UP
98	210004002A	MOTOR-MAIN
104	32500X0008	FUSE-MAIN
106	350LR3022A	PCB-SUB ASS'Y
109	033LR4002A	WASHER-BI METAL
112	36600X001A	FUSE-HOLDER
125	443LR4001A	L-WRENCH
127	KPS03012D2	KEY-PLAIN
128	KPS05010D2	KEY-PLAIN
130	RE001000C8	E-RING
132	SKE04010D2	SET SCREW
132-1	SKE05006D2	SET SCREW
132-2	SKE05010D2	SET SCREW
132-3	SKE05015D2	SET SCREW

Frame, Roller and Other View

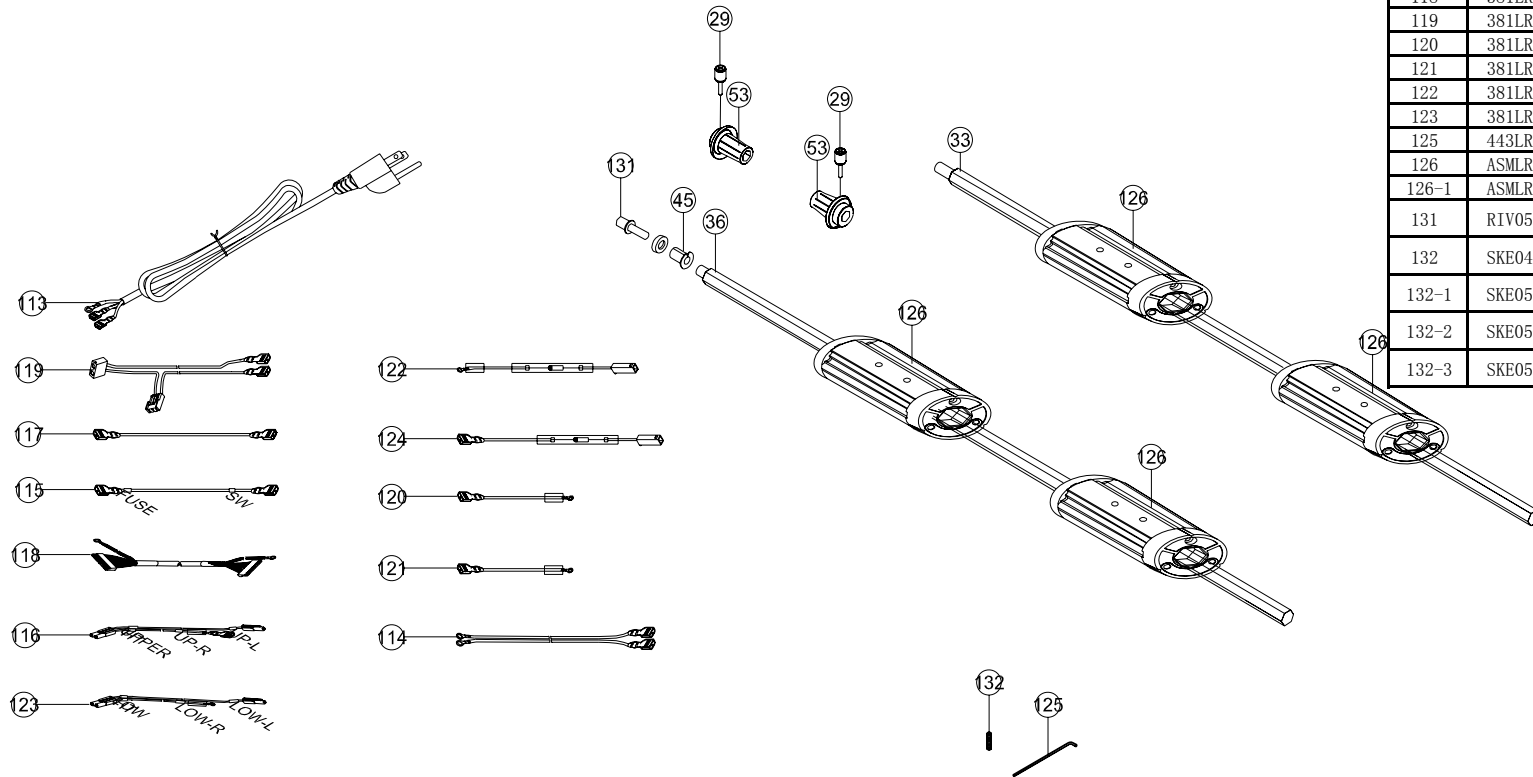


1	013LR2012G	FRAME-SENSOR
2	013LR2087A	FRAME-L
3	013LR2088A	FRAME-R
4	013LR3002H	FRAME-CUTTER
5	013LR3035A	FRAME-REAR
6	013LR3036A	PLATE-MIDDLE
7	013LR3069A	BASE-FRONT
8	013LR3070A	BASE-REAR
9	013LR4004A	FRAME-COVER SAFETY
10	014LR3001B	TABLE-FRONT
11	015LR2010A	IDLE BAR LOW
12	015LR3011B	IDLE-BAR
13	015LR3012B	SHAFT-DECURLING
14	021CR3001A	KNOB-CUTTER, C
18	ASMLR1604A	ASM-SENSOR
19	ASMLR1608A	ASM-SENSOR
21	021LR3024A	COVER-SAFETY
24	023LR4002A	KNOB-BOLT GUIDE
27	026LR4006A	FOOT
28	032LR3002A	SHEET-FUNC
29	111LR4004A	BOLT-CORE
30	111LR4006A	BOLT-GUIDE
31	111LR4018A	SCREW-H
32	112004001D	NUT
33	120LR3004E	SHAFT-FILM, L
34	120LR3031B	SHAFT-CAM
35	120LR4008A	SHAFT-TABLE
36	120LR4014C	SHAFT-TAKE UP
37	12200X005A	BEARING-TRUST NEEDLE
40	12200X027A	DU BUSH
42	12200X029A	DU BUSH
43	12200X030A	DU BUSH
44	12200X032A	DU BUSH
45	12200X034A	DU BUSH
46	12200X040A	DU BUSH
48	122LR4026A	BUSH-ROLLER PULL, UP
49	122LR4042A	BUSH-ROLLER LAMI, LO-LEFT
50	122LR4047A	BUSH-ROLLER PULL, LO
51	122LR4050A	BUSH-ROLLER LAMI, LO-RIGHT ASS'Y
53	124LR4006A	1" CORE
62	133LR3001A	ROLLER-LAMI
64	133LR3002A	ROLLER-PULL
70	138LR4001A	SPRING-CUTTER CROSS
74	140LR3001A	HOLDER-CUTTER, C
75	140LR4001A	HOLDER-SHAFT FILM
76	140LR4021A	HOLDER-SHAFT, T
80	141LR4005A	PLATE-SHAFT FILM
85	141LR4043A	FRONT TABLE SAFETY LEVER
87	141LR4059A	BRACKET-SENSOR
94	145LR3002A	GUIDE-DOCUMENT
95	147LR4002A	PAD-TENSION
100	213LR4001A	CUTTER-CROSS
101	223LR3001H	HEATER ASS'Y
101-1	223LR3001J	HEATER ASS'Y
102	23200X001A	SUPPORT-PCB
103	23300X001A	BUSHING-CORD
105	34000S011A	POWER TRANSFORMER
107	350LR3036C	PCB-MAIN ASS'Y
110	36400X002B	SWITCH-MAIN
124	381LR4092B	WIRE-T/FUSE(LO)
126	ASMLR1339A	ASM-AUTO GRIP FILM CORE 2"
126-1	ASMLR1339B	ASM-AUTO GRIP FILM CORE3"
131	RIV05018E8	RIVET
133	013LR4010A	FRAME-GUIDE, R
134	013LR4011A	FRAME-GUIDE, L
135	141LR4127A	BRACKET-DECURLING BAR, R
136	141LR4128A	BRACKET-DECURLING BAR, L
137	111LR4022A	KNOB-GUIDE

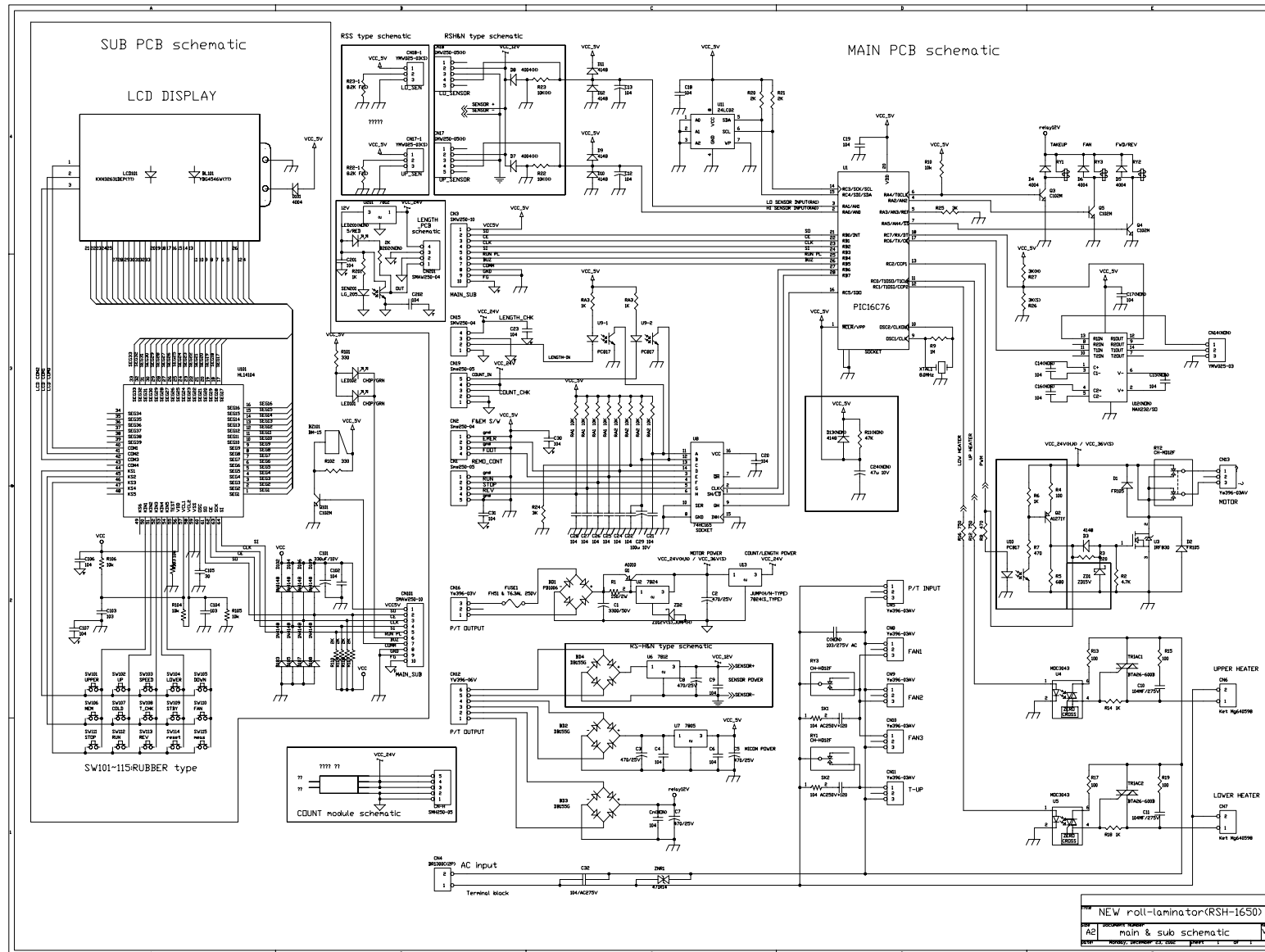


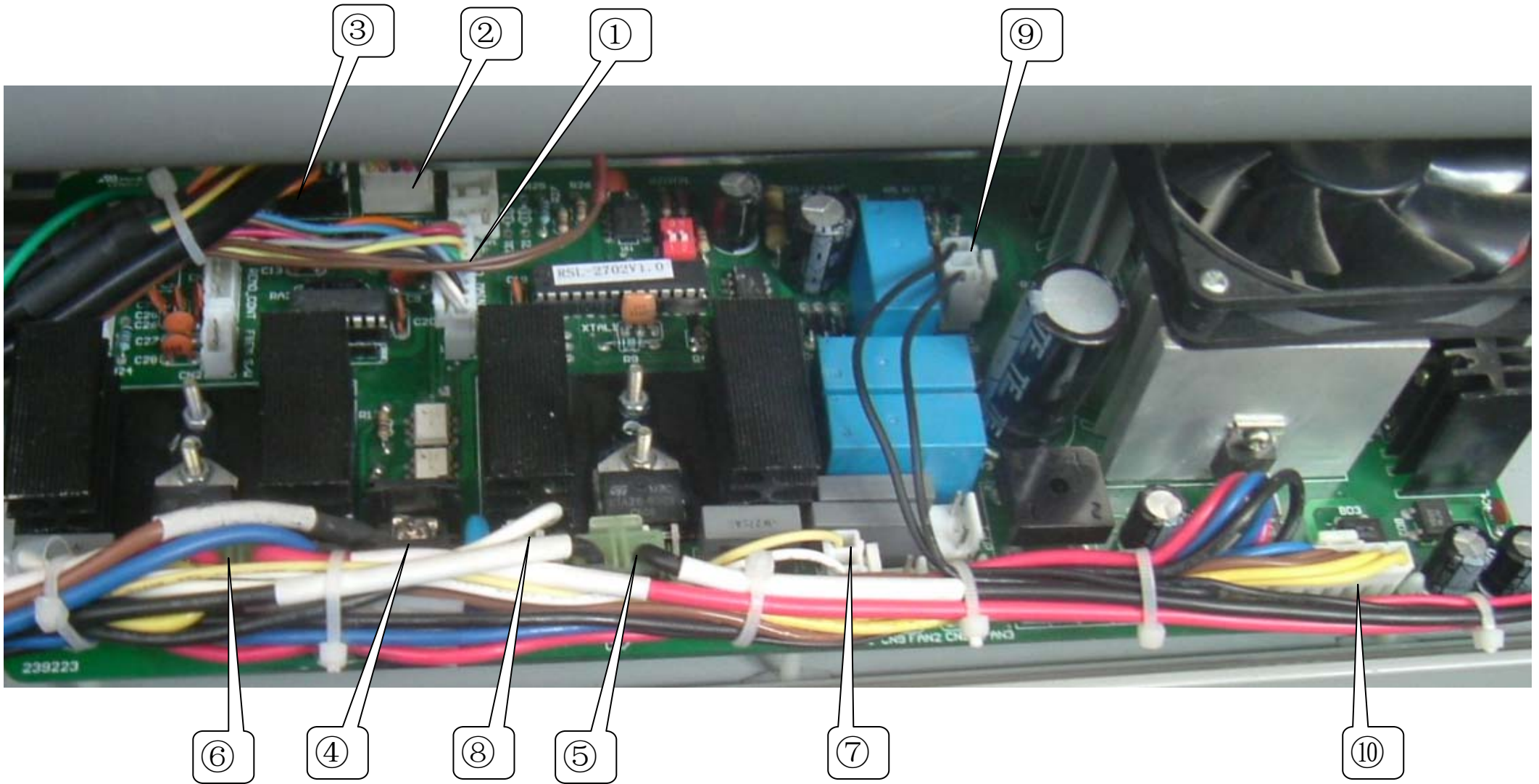
Wire, Front Table, Film Shaft

29	111LR4004A	BOLT-CORE
36	120LR4014C	SHAFT-TAKE UP
45	12200X034A	DU BUSH
53	124LR4006A	1" CORE
113	380LR4001A	POWER CORD
113-1	380LR4003A	POWER CORD
113-2	380LR4007A	POWER CORD
114	381LR4013J	WIRE-POWER S/W
115	381LR4020B	WIRE-FUSE, EU
116	381LR4030D	WIRE-UP HEATER1, EU
118	381LR4044B	WIRE-MAIN
119	381LR4052A	WIRE-MOTOR
120	381LR4054A	WIRE-LO HEATER2, EU
121	381LR4055A	WIRE-UP HEATER2, EU
122	381LR4084A	WIRE-T/FUSE (UP)
123	381LR4091A	WIRE-LO HEATER1, EU
125	443LR4001A	L-WRENCH
126	ASMLR1339A	ASM-AUTO GRIP FILM CORE 2"
126-1	ASMLR1339B	ASM-AUTO GRIP FILM CORE3"
131	RIV05018E8	RIVET
132	SKE04010D2	SET SCREW
132-1	SKE05006D2	SET SCREW
132-2	SKE05010D2	SET SCREW
132-3	SKE05015D2	SET SCREW



7. RSL-2702S,RSL-382S Wire Diagram



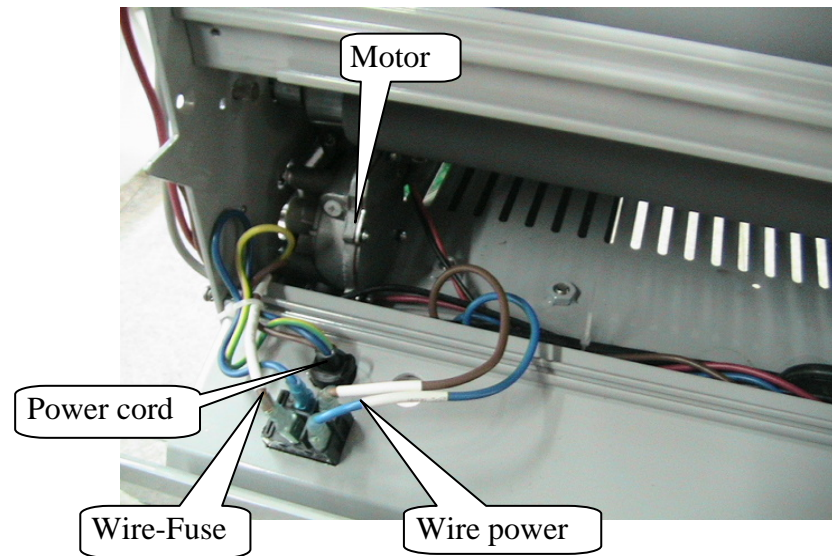
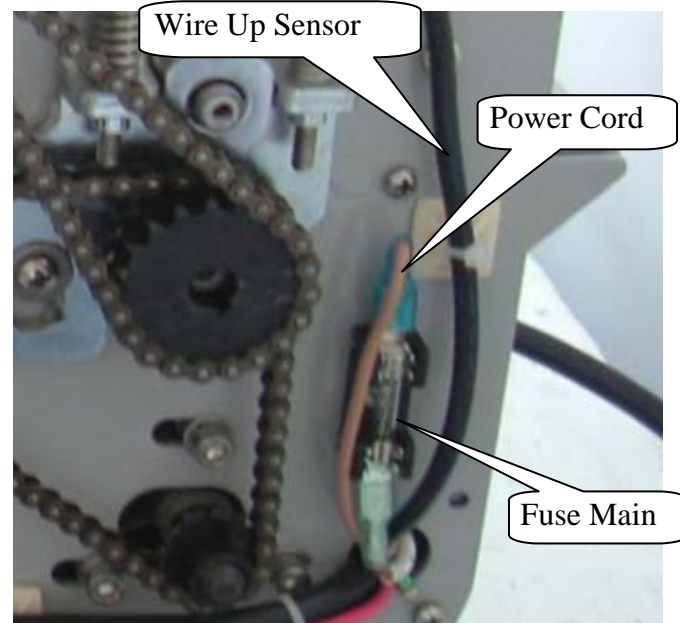
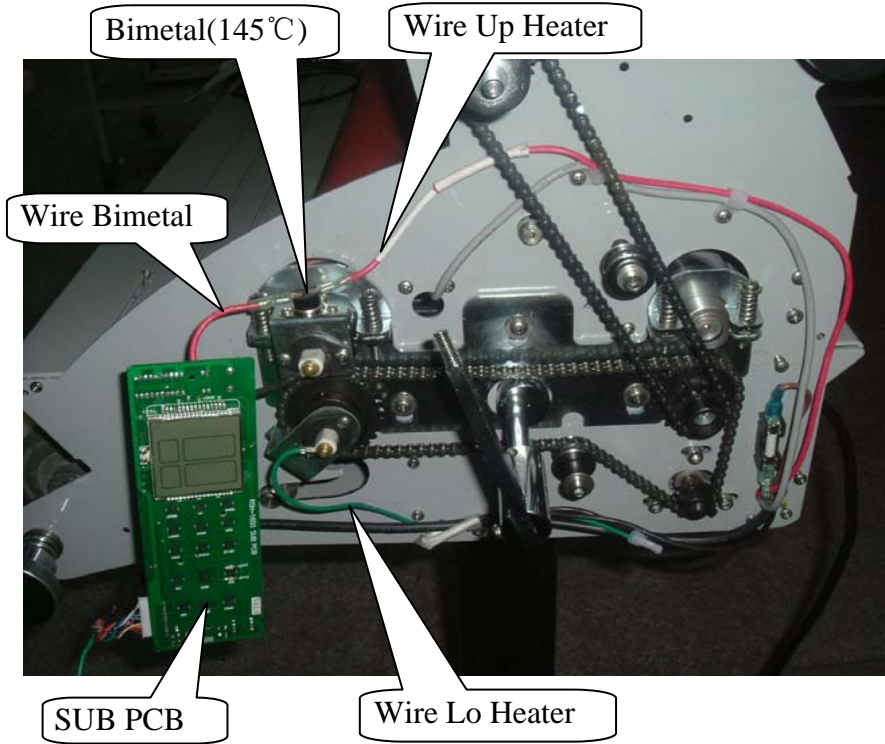


<Connect part>

- 1. Wire Main.
- 2. Wire Sensor Up
- 3. Wire Sensor Low
- 4. Wire Power
- 5. Wire Low Heater

- 6. Wire Up Heater.
- 7. Wire Fan(2EA)
- 8. Wire Power Transformer In
- 9. Motor wires
- 10. Wires Power Transformer Output

<SUB PCB and Frame-R Heater Layout>



<MICRO SWITCH and Frame-L Heater Layout>

